



Miracles of Herbs

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Miracles of Herbs

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Foreword

“Miracles of Herbs” is the title of a collected work over 1000-pages and the presented electronic book is a part of it, it is written in simple English in a way that the readers with simple knowledges of English can read and understand it and at the same time contains terms that the experts in different fields of work in relation to medicine and plants can distinguish it.

The plants and herbs are presented by their English and Latin terms, every plant and herb is presented first by their natural appearances, medicinal qualities, chemical substances, their traditonal uses, how it is planted, picked and prepared as medicine and their growing zones in the world.

The purpose of producing this electronic book is to receive help that hopefully would give us a chance to publish it's book form with color illustrations. I would like to thank Mr.

Khamsouk Keovongsay for his beautiful paintings, designs and technical help and wish you a pleasant reading.

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I wish you enjoy your reading.

I would like to thank Mr. Khamsovuk Keovongsay for his beautiful paintings, designs and for his technical support and my dear friend Dr. Kiros Fre-Woldu who supported me through many years.

Your best way of helping is to send your donation as fast as you can.

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Apple,
Apple-tree. E.
Malus orientalis. Ugl.,
Malus pumila. Grossh.,
Pyrus malus. L.
Rosaceae. L.



Apple: is the famous fruit of Apple-tree that grows mostly in form of a shrub. Some varieties of Apple-tree grow in form of trees over 25-metres high. Apple-tree: is commonly shorter than a Pear-tree and grows very seldom above 10-metres high.

Apple-tree's leaf: prothalus of it's upper leaves are covered by downs and have dentated margins in form of intervals.

Apple's flower: is a large flower and has a pink colour over it's outer cuticles.

Apple's fruit: is the well known and the famous Apple fruit and is accounted as a large fruit with almost a round elliptical form with two cavities, one at it's top and the other at it's bottom.

Apple-tree: savours more of odour compared to a Pear-tree during a night and Honeybees love to bring nectar from it's flowers.

Useful parts: Apple-tree's useful parts are it's fruit and stem bark, root and leaves and covering skin of it's fruit.

Chemical Substances: leaves and bark of Apple-tree's stem and also it's root's cortex contain a glucoside famous as phlorizin (phloridzin, phlorhizin) that under hydrolization is dissolved to a glucose and phloretine and resulted materials are concentrated in form of scale-shaped crystals similar to colourless scales insoluble in water but turns to crystals in alcohol and has antifever (febrifuge, antipyretic) effect and is used in medicine for treatments of fever.

There are several speciments of Apple fruits depending on speciment of their trees but Apple generally contains following substances: 82-86-percents water and 6-16-percents sugar substances, 0,9-percents cellulose and 0,5-percents pentosan, 0,4-percents ligenine and 0,6-percents organic free acids, 0,2-percents acids and especially malic acid, 0,3-percents tannin and pectin, fat agents and albuminoids, etc.

Apple fruit's ash: after burning an Apple it's remained ash is constituted by 0,3-percents of it, stotal weight and contains substances as potassium, tetter (dartras) and



silicon, manganese and calcium oxide and phosphoric acid in it's content, etc. Apple fruit: contains also A-, B-, C-and PP-vitamins especially in wild and uncultivated fruits of Apple-trees.

Apple fruit's vitamins: are mostly concentrated in it's fruit skin and in it's red epidermis.

Apple fruit's seed contains: 24-27-percents oil and amygdalin and enzymes as oxidase, peroxidase and pectase.

Apple-tree's bark: has strengthening and constipating effects and because of it's phlorizin content has a mild antifever (febrifuge, antipyretic) effect but cortex (bark) of it's rhizome has a higher effect than it's tree's bark (cortex).

Medical Qualities: Leaf of Apple-tree has diuretic effect as the outer skin of it's fruit and are commonly prepared and consumed as infusion prepared in the same way that infusion of Teais prepared.

Apple leaf's infusion: is consumed for increasing urine and is used for curing kidney and urine-bladder's inflammation and spasm (tension). Existing phlorizin in Apple-tree's fresh bark and existing isophlorizin in it's leaves have antifever (febrifuge, antipyretic) and anti-rheumatical effect and is used in doses of 0,50-0,70-grams per day.

Ripened apple fruit: has a mitigative (lenitive) and anti-catarrh (anti-rheum) effects and is anti-diarrhoetic with a diuretic and calmative effect, these qualities are related mostly to Apple fruit's skin with content of mentioned vitamins.

Boiled apple fruit: a Boiled apple fruit is lenitive (laxative) and when it is boiled together with a small dose of butter is useful for curing insomnia (difficulty for sleeping) and creates a feeling for a calm asleep.

Raw or Boiled apple: prevents uric acid to establish in body and because formic acid in urine is also increased it is useful for persons suffering from rheumatism, gout, arteriosclerosis, chronic eczema, fetma, rush of blood into the head, piles and skin diseases.

Apple fruit's molass (saps): has a useful effect against cold and hoarseness of voice, coughings and catarrh (rheum, coryza) of brochitis, breast diseases and neurotical behaviour, etc.

Apple fruit in cans: Apple is mostly used in form of conserves in cans and marmalade delivered to patients in hospitals around the world and some people cure diseases by Apple fruits.

Wild apple fruit: consuming Wild apple fruit for curing simple diarrhoea has been common among folks since some centuries back in a way that some physicians have mentioned Apple fruit's medical effects during the year of 1554 for the first time. Modern researches has shown that having of Apple fruit is useful in curing acute inflammation of intestines and especially when the patient is a child.

Inspissated (thickened) juice of Raw and Ripened apple fruit: is prepared after separation



of their seeds and seed bed areas and then can be consumed in deal of 500-1500-grams per 24-hours in 5-potions, it will not create stomach disturbances and the mentioned treatment is done in 2-days without with respect of having no other food.

Apple quench thirst: in cases of intensive thirst a thickened Apple Juice is consumed as much as a little cup of Tea with sugar.

On the third day the patient should gradually begin to have little food. By this treatment excretions (feces) will be normalized and pain with discomforts of mentioned diseases can be tranquilized.

Raw apple: consuming Raw apple has been recommended in matter of acute inflammation of children's intestines and antrocolitis, dysentery and typhoid fever (typhia, typh fever), chronic gastroenteritis and large intestine's inflammation, etc. By paying attention to medicinal effects of Apple and that a great deal of it can not be consumed by children some researcher have made a powder of Dried apple in vacuum famous as alpona for children, every 100-grams of this powder is equal to 1-kilogram of Fresh apple fruits, it is soluble in any liquid and has little bulk (volume).

Apple fruit has sufficient pectin material and therefore has effect in reducing cholesterol though when it is consumed a certain diastase with antibacterial character in it's content disinfects the intestines and purifies the blood and has also effect on body cells and therefore is useful against physical tiredness, especially in case of sport's men and women and counteracts psychological tiredness and has a great positive effect during a pregnancy.

Apple fruit is useful for preventing arteriesclerosis and manifestation of disturbances caused by infection of intestine (caused by poly bacills), it is useful for driving urine sediments and curing headaches caused by nervous origin and smaller dose of it can be consumed by diabetics.

Apple fruit's skin: that has been dried by stable middle temperature or by being placed beside a stove has useful effects against different diseases.

Dried apple skin's tisane: has been recommended against inflammations of joints (arthritis) and is used for curing gout, for curing rheumatis and kidney diseases with decline in urine. After consuming mentioned tisane the bulk of urine is generally increased and it's colour is turned to bright, uric acid is driven away function of digestion and intestines will be regulated.

Apple's cider: is prepared through fermentation of Apple fruit's molasses and a kind of alcohol drink is produced famous as Cider and Cider is extracted mostly in European countries in areas where there is no grapes.

Boiled Apple with saindoux fat: makes a remedy famous as Pomata that is a word derivated from pomade and is used for healing skin diseases and skin clifts, etc.

Boiled apple molasses: can be used as gargle against angina. An Apple fruit contains generally: 30-40-percents glucosides and every 12-grams of containing glucoside of



Apple can be collected from 100-grams of Apple and because it is mostly fructose it can manifest the effect of reduced cholesterol in blood. Consuming 300-400-grams of Apple fruit reduces 10-20-percents of blood's cholesterol per day and in normal person with no extra cholesterol reduces it to 50-percents.

Medical Forms: Apple is consumed in form of infusion or decoction of 120-grams skin of Apple-tree's bark or it's leaves and Dried apple skin's tisane as much as a soup-spoon for each used glass of water, boiled in 1-hour or is consumed in form of Apple's pressured juice. An infusion made by 2-3-Apples boiled in 1-litre of water in 15-minutes and then consuming a dose of 4-6-cups and even more is useful against bronchitis (respiratory way's catarrh), gout and intestine diseases.

An infusion prepared by Apple fruit's skin as much as a soup-spoon for each cup and consuming 4-6-cups a day for increasing the urine is also useful for curing rheumatism and gout.

Apple juice: for preparing Apple juice 875-grams of cube-sugar is mixed in 500-grams of Apple molasses and the whole is heated by a medium heat.

External use: pieces of Boiled apple in Apple molasses and Olive oil in equal amounts is mixed and used for applying over chronic sores. Apple molasses strengthens facial skin cells and cells in neck, breast and belly when the Apples used are fresh. For preparing: a Boiled apple fruit is mashed in milk and while it is still warm is used in form of a facial mask.

Traditional Uses: Both Common apple and Sweet apple fruits are riped at the end of the Spring time and in the beginning of Summer, their life time is short after picking therefore keeping them fresh during the rest of a year is a difficult task, many countries can not store them yet, both types are sweet and tasty, odorous with the difference that Common apple fruit contains more sugar than Sweet apple but on the contrary Sweet apple's aroma is more than Common apple's fruit, then Sweet apple's skin is harder and therefore has the ability to preserve it's aroma during a longer time but because all types of stomachs can not digest it's skin it is removed before consumption and thereby loses it's natural gifts in content of it's skin, persons with weak stomach can have of it together with it's peel but should chew it properly or grate it for making it easy of digestion. Both Common and Sweet specimens of Apples are food for body and soul and give strength to muscles and nerves, disinfect mouth and neutralizes it's fetid smell, persons with a fetid mouth are recommended to have vegetable as Salad firstly and then have an Apple together with it's skin. Persons having an Apple before breakfast would hardly get sick, both kinds of Apples drive uric acid and therefore are a cure for persons suffering from rheumatism, joint pain (arthralgia) and gout, both Common and Sweet apple increase and strengthen the glands of mouth's saliva and stomach and therefore help the digestion and are useful for functions of orifice (opening of stomach, cardia) and heart.

Persons suffering of stomach ulcer and are ordered not to have raw vegetables can



easily grate Apples and have of them without boiling them because they have already been cooked under the sun while they were hanging in the trees.

Persons having of Apples with their skins would be released from constipation of stomach and from fatigue intestines and fatigued liver. Despite the fact that Apples are sweet they are harmless to diabetics and are instead appetizers and create feeling of mirthfulness, cure palpitation (throbbing) and asthma, give strength to heart, brain and liver and makes it easier for stomach to drive away gall and in a way prevents cancer.

Apple fruits can cure darts (affected with tetter or darts; atrabillious, melancholy) and because Apple is antitoxin (antidote) it can counteract Scorpion's poison, it is a great help to rub a piece of an Apple over sting of a Scorpion or a Bee.

A poultice of Apple flesh is useful for calming the pain of eyelids. A kind of remedy is extracted from unripened Apple fruits for curing dysentery (bloody flux or diarrhoea), it is harmful to drink cold water after having of unripened Apple fruits while one is feeling discomfort and heaviness in stomach.

When farmers (peasants) catch cold they prepare a diet by Apple fruits and would not eat other food than Apples in three days and therefore are cured easily because Apple is the best medicine against cold. Apple drives an infant's body poisons and when infants are given Apple juice they would feel calm and would not cry. A grated Apple is useful against diarrhoea and is especially useful for infants. Both Sweet and Common apple contain phosphorous and give strength to nervous system and both types are soporific (somniferous).

Apple fruit is the best remedy for persons suffering from sleeplessness (insomnia) by having a few Apples with a glass of water before going to sleep.

Elixir of Apple-tree's leaf: is antiworm (vermicide or vermifuge) and is useful for decreasing warm inflammations.

Apple's marmalade: a marmalade is produced by Sweet apple fruit's flowers useful against weak heart and weak brain and for making a better marmalade as remedy for the mentioned diseases flowers of Sweet rose are taken and added twice more than Sweet apple flowers.

Sour apple: is picked unripened and is available in markets with content of malic acid and is very useful for driving bile excess, it is useful in case of blood congestion and is more useful than Sweet and Common apple for curing darts (affected with tetter or darts; atrabillious, melancholy).

Warning: Sour apple is not useful for persons suffering from dysentery (bloody flux or diarrhoea) and persons with weak nerves should not consume it.

Sour apple's juice: is used in warm form for curing gall diseases and driving bile-bladder's calculus (stones).

A character of an Apple-tree is the times it gives fruits as it gives fruits during the spring, summer, autumn and winter and are available in markets during the whole

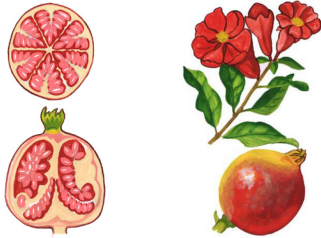
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year.

Growing zones: Apple-tree grows almost everywhere in the world today and has been grafted in many forms, all countries in the world consume a few types of them in a way that Apple's categorization would certainly need a global research.



Pomegranate tree,
 Carthaginian apple. E.
 Punica granatum. L.
 Punicaceae/Granataceae. L.



Pomegranate: is the fruit of Pomegranate shrub and is included in a small family generated from one gene including 2-varieties with characters similar to Myrtaceae family and therefore it is grouped in different classifications as to belong to Punicaceae family but sometimes it is mentioned as to belong to family of Myrtaceae. One characteristic of plants in family of Punicaceae is their simple opposite leaves and bearing of male and female (hermaphrodite) flowers and their especial type of flower-cup is compounded by 4-8-fleshy pieces adjoined in its ovary. Pomegranate's flower-cup: is red or pink and is compounded by large pieces that are wrinkled in the beginning but after flowering turn completely to smooth ones with plenty of stamens inside its flower. Pomegranate's fruit is an especial berry fruit with content of hard seeds enclosed in a juicy organ similar to a diamond. Difference of plants in this family in comparison with plants in family of Myrtaceae is the lack of secretory vessels of schizogene and inner vessels and besides, their ovary has a especial form that after maturancy create berry fruits. Spreading of Punica granatum is mostly in Europe as in Greece and especially Mediterranean areas, in Asian countries as in Iran, Turkey, Pakistan and Aghanistan and even in South Asian countries and in other countries as the countries in North Africa. Pomegranate's medicinal specimens are presented in the followings.

Latin word of Granatum is derived from the word Granum that indicates to the fruit of this plant containing several berries.

Pomegranate shrub: grows up to 5-metres high. Pomegranate's fruit: is a 4-6-sided (quadrangular or hexagonal) fruit and have one pipe-shaped crown at its top and is attached to its tree's branches from its end part, its branches have some thorns. Pomegranate's leaf: its leaves fall almost easily during the four seasons and its new leaves grow constantly instead of the fallen ones, its branches are in form of spread ones with thorns and its young branches have small wings. Pomegranate's leaves are mostly opposite leaves with a cyme form over its short branches and are complete lanceolate-shaped with leafless and short footstalks.

Pomegranate's flower: its flower grows between 1-3 at its branch tops and are 4-6-centimetres wide, its sepals and its fruit are bright red and has 5-9-sepal-shaped



with triangular shapes of lobes, it has 5-8-petals that are soft and a little bit wrinkled with a length of 2-3-centimetres and 20-inward leaned stamens, some specimens have white but most of them have red flowers, some specimens have flowers without odour and dew and Honeybees are not interested in them.

Pomegranate fruit is normally 12-17-centimetres in diametres with an elastic pale yellow coriaceous cortex containing cavities for it's granate berries in two levels inside itself, it's upper level is divided with 3-chambers and it's lower level has 6-9-chambers with plenty of granate berries enclosed inside a coriaceous-like skin with thin membranes dividing it's content into irregular sections containing granate berries, in some specimens it's yellow fleshy part and it's extended thin membranes are white rose. Pomegranate's berries: it's granate berries are fleshy with a thin bone-like stone inside it that can be chewed with the content of tanning materials and alkaloid and can not be separated from it's flesh.

Pomegranate root's cortex and Dried stem barks: are used as vermicide (antiworm) and are used against vertigo (obfuscation, giddiness) in homeopathy, Pomegranate's berries are used in form of inspissated juice and as food spice, it's pressured juice is used in form of refreshing and blood purifying drink. Almost all parts of Pomegranate's shrub are used in pharmacological industries and it's bark is famous as *Cortex granati. L.*, it's fruit bark is famous as *Cortex fructus granati. L.*, it's fruit is famous as *Malus granata. L.*, it's fruit granate is famous as *Malum granatum. L.*, the cortex flesh inside it's fruit is famous as *Cortex malicorium. L.*, it's flower (cultivated one) is famous as *Cytini. L.*, flower of it's Wild specimen is famous as *Balaustia. L.*, and Pomegranate berries' stones are famous as *Seminae granatorum. L.*

Original home for Pomegranate shrub has been Iran but it grows in most of the Central-Asian and Southeastasian countries as well, it grows in some of the mediterranean countries in form of cultivated ones.

Wild pomegranate: grows in Southeastern parts of Iran as in the province of Baluchistan and in Northeast provinces near Afghanistan, Pakistan, it grows in all countries around Iran and later on was brought to Northafrican countries and Mediterranean and different parts of Europe. Pomegranate is taken as a holey fruit in Buddistic Southeastasian countries' temples.

Pomegranate fruit's taste different and there are Sour, Sweet and mixed Sour and Sweet Pomegranates.

Sweet pomegranate: Sweet type of Pomegranate is useful against breast and respiratory organ's diseases while the Sour pomegranate dries the breast and is harmful to persons suffering from coughing or breast disease, but there is nothing more useful for persons suffering from liver-inflammation than Sour type of pomegranate. Pomegranate fruit's nourishment: is low but it contains A-, B-, C-, E-vitamins and great deals of iron and other minerals. Pomegranate's juice: it's finest pressured juice

is pressured inside a container by mashing its fleshy berry parts without mixing its mild stones, the prepared juice has higher effect compared to a prepared juice from fleshy parts of its berries mixed with their stones but Pomegranate's stones are mitigative and rinse the intestines, Pomegranate's juice contains sugar and tannin, one tannic acid and a useful substance, it is a mirthful drink for liver because it rinses the liver and thereby facial complexion gradually after consuming a while turns to a brighter one, it is a diuretic and a refresher of the body organs, mixing its juice with some water and drinking of it helps against urine canal diseases and mitigates the organs that are the origins to inflammations, it increases the secretion of bile when there is a need of bile but there is a shortage of it, has a constipating effect and heals diarrhoea.

Pomegranate's juice with Honey: after mixing Pomegranate's juice with some Honey well few drops of it are dropped in nostrils a few times during a day for preventing growth of polyp.

Pomegranate's juice: contains A-vitamin and helps children's growth, its content of B-vitamin strengthens the nerves and cures anxiety, its content of B6-vitamin is antiemetic and cures pregnant women's intensive desire for eating certain things, it has been recommended for pregnant women to consume Pomegranate's juice and use Pomegranate's inspissated juice as spice in food because it is useful for well being of an embryo (foetus) and helps its development and by containing iron and other minerals helps the production of blood cells.

Best time for having Pomegranate's berries: is before a breakfast and with a little amount of Heracleum's oil (*Heracleum gumiferum*. L.) helps the digestive organs to smell good, it is diuretic, strengthens the sexual lust and is a cure against diarrhoea.

Pomegranate's boiled berries: Some people boil Pomegranate's berries and after refining consume its juice, some pour Pomegranate's fruit juice in some amount of Rice and Barley and boil it in water and after refining use its juice in form of a suppository.

Mentioned method has given positive results and is done through drinking or using its juice as suppository for healing stomach ulcers and for curing inflammation of intestines.

Pomegranate berries mixed with Honey: is useful in care of nose's skin and skin sores.

Pomegranate's juice with sugar: drinking Pomegranate's sweet juice after mixing it with sugar and starch mitigates breastache, coughings and cures jaundice as well as Paleness (chlorosis).

Useful parts: its useful parts are its flowers and fruit's skin but branches and bark of its root are mostly used in pharmacological industries.



Pomegranate's fruit skin: is used in leather and dyeing industries and its dye is used for example in dyeing carpet's wool threads. Pomegranate's sour juice as gargle: gargling and keeping Pomegranate's sour fruit juice in mouth cures aphtha (thrush) and mouth's inner pimples and strengthens teeth gums.

Warning:

its sour fruit is not useful for persons suffering from stomach ulcer and hurts frozen persons and decreases liver's absorption force.

Sweet and Middle sweet pomegranate fruit: drives away the bile and strengthens the stomach and liver and helps against bilious fevers, jaundice and skin diseases.

Cortex (bark) of Pomegranate's branches and root contain: 22-percents tannin and pharmacologists produce four substances from it with antiworm effects

For removing tapeworm: 60-grams of Fresh root cortex or its Dried powder is mixed in 750-grams of water in 6-hours and then is boiled until a half litre of it remains, then after refining the prepared infusion is divided in 3-potions, each potion should be consumed every 90-minutes. After two hours the third potion is consumed and a laxative remedy should be consumed and then the patient should be waiting for the tapeworm to exit, it is usual that the patient is located sitting in water as warm as the stomach temperature and wait for the tapeworm to fall out entirely with assistance of another person for minimizing the chance that the worm could be cut and parts of it are left in the stomach of a patient. Dose for children is 1/7-1/3-of the mentioned portions.

A poultice prepared by Pomegranate's boiled fruit skin: is useful against skin diseases, especially eczema injuries and smarting irritations.

Pomegranate's inspissated juice: is used against yearning (pining, languishing) and for curing sadness.

Pomegranate's boiled flower juice: cures caries (decay) and prevents teeth gum's bleeding.

Pomegranate's tree: has since the ancient times grown in areas such as in province of Kurdistan in Northwest of Iran and Baluchistan in Southeast of Iran and in Northeast near Afghanistan in wild form and was later on spread to other parts of the world, Pomegranate tree has none smooth branches and hard wood and is covered by a brown green-coloured bark with plenty of irregular shapes and gradually turn to red brown and are usually lead to thorn-shaped tops. Pomegranate's style: has several carpels adjoined to its receptacle-cup in a way that they build an inferior ovary with several adjoined carpels together in 1-3-rows conforming on each other. Pomegranate's fruit is round and is accounted to be a large fruit as Seville fruit or larger with coriaceous, red and thick skin or with thin and rough skin.

Some Pomegranate specimens bear white flowers and in some varieties its berries are covered in a fleshy white pink membrane. Pomegranate's large flowers: lack odour and nectar and therefore are not desirable for Honeybees.



Chemical substances: different parts of Pomegranate and especially its cortex (bark), root and its stem contain 22-percent softannin (tannic acid) and punicotannic acid. A scientist (during 1877-1880) extracted four following alkaloids: pelletierine, isopelletierine, methylpelletierine and Pseudopelletierine.

Pelletierine: is a compound of isopelletierine and punicine and is an alkaloid extracted from bark (cortex) of Pomegranate's roots. Pelletierine in form of plus and minus are oily fluids. Pelletierine is boiled in 195-degrees and dissolves in alcohol, ether and chloroform, every gram of it dissolves in 20-millilitres of water. Pelletierine's both plus and minus forms dissolve in ethanol in form of crystals, its plus form melts in 130-131-degrees and its minus form in 130-132-degrees, it is regarded in medicine to have antiworm effect, Pelletierine is never used medicinally and as always its pelletierine sulphate, or tannate of pelletierine has been used. Sulphate of pelletierine: is the only mineral (salt) of Pomegranate and is used medicinally, great deals of it is soluble in water and alcohol. Dose of it for adults is 0,30-0,40-gram during 24-hours.

Warning:

Sulphate of pelletierine and its other minerals (salts) are dangerous drugs and should generally not be consumed by children younger than 15-years old, its medicinal usage should take place under supervision of a physician.

Tannate of pelletierine: or Punicine tannate is a mixture of tannates and alkaloid of Pomegranate's root in form of an amorph, its dust is light yellow with constipating taste, it is soluble as one part in 250-parts of water but is soluble in higher doses in alcohol and warm light (diluted) acids and small deal of it is soluble in ether and is almost insoluble in chloroform, Pelletierine tannate should be kept in closed bottles away from light, Pelletierine tannate has been formerly used against worms with a dose of 120-500-milligrams and is an intoxicating material and therefore should not be consumed by pregnant women.

Pseudopelletierine: or Pseudopunicine is found in cortex of Pomegranate roots and has been extracted in petroleum ether with a prisma shape that melts in 45-degrees, it is a strong potassium and is volatile, each gram of it is soluble in almost 2,5-millilitres of water and 10-millilitres of ether and great deals of it is soluble in alcohol and chloroform, small amount of it is soluble in petroleum ether and its dihydrate is extracted in form of small crystallized small sheets, its chloridrate salts (minerals) and its sulphate with 4-hydration molecules of water is formed in to a crystallized shape.

Methylpelletierine: has a liquid disposition and is a right oriented one. Digallic acid: has been extracted from tannin or galutannin from the city of Aleppo and galutannin



from China, it has juicy needle-shaped crystals and is extracted in mixture of water and alcohol, in 110-degree's of heat turns to a dihydrated one and is analyzed in 280-degrees, it is also soluble in 1900-parts of 25-degree's water and 50-60-parts of boiling water, it is soluble in methanol, ethanol and acetone and it's solution is low in ether and glacial acetic acid.

A reasearch has shown that when the agricultural land is given super phosphrous fertilizer it's effect in increasing of relative figure of alkaloid is more than other fertilizers as ammonia sulphate (sulphate of ammunium) and iron sulphate.

Table below shows the effect of types of manure (fertilizer) in relation to the plant's alkaloids.

Fertilizer type:

Super phosphorous type creates Pomegranate trees that contain 5,5-per mille alkaloids in their branches and 7,5-per mille in their roots and fertilizer type of AmonniasulphatecreatesPomegranatetrees that contain 4,20-per mille alkaloids in their branches and 6,5-per mille in their roots and the type of iron sulphate fertilizer creates Pomegranate trees that contain 5,70-per mille alkaloids in their branches and 6,10-per mille in their roots.

Mentioned alkaloid exist in all parenchyma cells with exception of those containing calcium oxalate's crystal. Amount of mentioned alkaloids depends on the type of fertilizer (or manure, dung), age of a plant, conditions of a plant's location, type of the plant, time of harvesting, etc.

Medical qualities: all parts of Pomegranate tree contain great deals of tannin and has a rather strong constipating effect, it's root's cortex is the best antiparasite material for removing parasites such as tapeworm and else.

Pomegranate's flower: is used for internal diseases in form of an infusion or decoction for curing simple diarrhoeas (after periods of tensions), simple bleedings, secretion of mucous materials, leucorrhoea (fluid secretion of viginia) and for external use, is consumed for gargle and for mitigating the inflammation of tonsils Tonsillitis).

Pomegranate flower's: 30-per mille's infusion by macerating them in hot boiled water in 10-minutes is used as vaginal suppository for prevention of leucorrhoea.

Pomegranate's leaves: fresh or dried leaves give pleasant tisanes with positive effects in cases such as weakness of stomach's functions (dyspepsia) and bad appetite, disposition of nausea (sickness) and general weakness, anemia of young girls and for curing general tiredness after sick periods, for curing migraine and disposition of chonical diarrhoea, etc.

Creation of constipation is the only disadvantage of Pomegranate parts.

Pomegranate tree's cortex: contains great deals of tannin and is accounted among the bitter strengtheners and is also consumed in external uses similar to it's flower.

Pomegranate fruit's granates or berries: granates in it's fruit contain small amount of tannin but granates's powder is sometimes used for prevention of leucorrhoea

and can also be useful for healing ulcers and sores by affecting it over them. Pomegranate juice: has a diuretic and soothing (mirthful) effect, consuming it's diluted juice with water has been recommended for curing urine ways's diseases, for healing the source of body organ's inflammatory diseases and diseases where there is a lack of bile secretion, it has a constipating and anti-diarrhoetic effect. Treatment of pulip: for preventing development of pulip little amount of Honey is added to Pomegranate's juice and few drops of it are poured in nostrils in repeated few times. Cortex of Pomegranate's root: removes tapeworm both in form of Dried or Fresh, it's consuming is preferable to Pelletierine because in alkaloid form is found mixtured with tannin in bark of it's root and because it lacks the absorbtion ability from mucous (pituitary) and it may be not be absorbed or little amount of it is absorbed that results in it's effect only over the worms and it may cause side effects as nausea (sickness) and vertigo (veritiginous), diarrhoea, gripes (tenesmus, colic or contortion of stomach or stomachache), disturbances of sight and when this happens a patient should stay steady because these side effects would gradually but completely vanish.

After consuming the bark of Pomegranate's root tapeworm or other parasites would turn to senseless ones and should be removed out with the help of a laxative (purgative).

Bark (cortex) of Pomegranate's stems: is equally effective in removing tapeworm and other parasites. One of the best methods for removing the worms is as in the followings: 60-90-grams of dried bark (cortex) of root or stems are macerated in two separate cups in 24-hours and then heated mildly, the heat is increased then gradually until the solution is thickened to only one cup, resulted liquid should be consumed in 2-3-times depending on disposition of nausea (sickness) or lack of this disposition.

For preparing the mentioned infusion and drink it when it is completely cool or enter it in ice water, some make it to a juice drink by adding Mint's essence and after consuming when the patient is feeling disturbances in intestines without feeling nauseous (sickness), a laxative (purgative) should be consumed.

There are several other methods, some are presented here: One of the methods of consuming cortex of Pomegranate's root is done by maceration of 60-grams fresh bark of root in 6-hours in 750-grams of water and then is boiled by mild heat until the whole is reduced to 500-grams, after refining and dividing it in 3-parts, each part is consumed every 1,5-hours after each time's consuming. A laxative as Castor oil is used 2-hours later when last part has been consumed.

Another method is done by boiling 20-grams of Pomegranate root's bark in 800-grams of water, when the whole has been reduced to 0,5-litre a solution is prepared for using in form of an enema. In cases when after consuming an infusion of it's



stem's or root's bark a disposition of vertigo (vertiginous) is created and sight's disturbance takes place it is better that the patient is located on backside with closes the eyes until the disturbances are over. When sulphate of pelletierine is consumed instead of infusion of root's bark the position of lying down or closing the eyes would not affect the disposition of illness. Considered dose of root's or stem's bark for children and women should be lesser than the mentioned ones, besides the infusion should not be consumed at once but in divided parts a few times a day. A recipe for removing tapeworm is prepared as in the following: 20-grams of alcoholic elixir of Pomegranate root's bark, 140-grams of water, 10-grams of distilled Mint's essence (Mint-water) and 30-grams of a simple sherbet are mixed and the solution should be consumed in 3-times before the breakfast.

Warning:

produces of Pomegranate's root should not be ordained for children younger than 5-years old, nervous-or easily excited persons and pregnant women should also avoid using it.

Pomegranate root's cortex is used for curing diarrhoea and in treatment of intermittent fevers, etc. Pomegranate's root should be drawn out from its soil during the autumn season and after washing its cortex should be separated and dried quickly. Pelletierine's sulphate as bark of its root and stem has vermicide (antiworm) effect and removes tapeworm and other parasites but because it is absorbed easily from the intestine's mucous (pituitary) creates intensive disturbances and therefore before consuming it some amount of tannin is added for diminishing the disposition of illness or in other word prevent its effectiveness.

A recipe for removing tapeworm is as follows: 0,30-gram sulphate of pelletierine, 0,40-gram tannin, 25-gram simple sherbet, 25-grams distilled water and 10-drops of Sour citron (alcoholat of citrus) are prepared and a mixture of mentioned materials should be consumed in two times with 30-minutes pause, 1-hour after consuming the second part the patient should consume 30-grams of castor oil.

Growing zones: Pomegranate is widespread in different areas of Iran as in Northern areas especially near Bandare-Anzali great areas of sand lands are covered by small tree's of wild Pomegranate, this can be seen elsewhere over the mountain slopes as over the lower slopes of Herzovil and Rudbar: in Kooshack.

Wild pomegranate trees can be seen in Bandare-Gaz as well as in the province of Mazandaran between the cities of Babolsar and Nowshahr, in the valley of Heraz, in province of Azerbaijan near Asbina, in province of Kurdistan: around the Aurooman mountain and Shahoo, in province of Luristan: in area of Tee, in province of Baluchistan: in areas of Kuhe-Bam-Pusht and Mian-Darreh, in Central province around the city of Ghazvin, Karaj and Kuhe-Dashte near Karaj.

Saffron,
Crocus,
True-Saffron,
Dye-Saffron. E.
Crocus sativus. L.
Iridaceae. L.



Saffron: is a perennial bush plant that grows between 8-40-centimetres high. Saffron belongs to family of Crocuses divided into early spring and autumn flowering plants and have corms that are covered with various types of tunics. There are one hundred specimens of crocuses in Europe and Mediterranean areas, in Central Asia and in Western Pakistan but the majority of them grow in the Balkans and in Turkey. There are 8-ornamental specimens of crocus's in Iran and together with the cultivated one makes the 9-following specimens as: 1) *Crocus sativus*. L. 2) *Crocus almezensis*. Brickel & Mathew. 3) *Crocus nichelsonii*. B. Fedtsch. 4) *Crocus biflorus*. Miller. 5) *Crocus caspius*. Fisch & C.A. Mey. 6) *Crocus speciosus*. M. Bieb. 7) *Crocus cancellatus*. Herb. 8) *Crocus haussknechtii*. Bois & Reut. ex. Maw. 9) *Crocus gilanicus*. Mathew.

Cultivated saffron: is a perennial bush and grows up between 8-40-centimetres high and it's leaves are narrow, light green with a white central stripe, their width varies from 2-5-millimetres and their length might reach up to 40-centimetres.

Crocus flower: has 6-violet tepals (3-sepals and 3-petals) and 3-yellow stamens, one colourless style that is ended to 3-deep orange stigmas. Saffron's dried stigmas are commonly known as the superior Saffron and are used as dye and food spice and for medicinal purposes. There are 1-4-buds over the top of it's corms. In the middle of fall season 1-3-flowers and then 5-11-leaves grow on these buds, there are also some small buds over the circumference of it's corm, when the top buds fail to grow some of these small buds will begin to grow. When the stigmas and styles are sold together in commercial markets and it is not accounted as cheating the price of it as Saffron would be lower than Saffron sold in form of only stigma.

Saffron has a strong sweet odour and pleasant aroma, bitter and a little bit hot taste and some insects escape away from it's flowers.

Saffron's fruit: is not developed and Saffron is cultivated by small buds (tunics) over it's corm. Spreading: Saffron is unknown as wild plant and only cultivated ones are known mostly in Iran and countries of Western Mediterranean.



Useful parts: Only stigmas and styles, leaves and it's oil are used.

Saffron's dye and taste is expected when the stigmas are dried.

Saffron's vegetation period: is between 6-8-months and is usually from October to May.

Cytogenetic study of *Crocus sativus* states that it is an auto-triploid plant and is a self-sterile plant that fails to produce seeds upon selfing or crossing, there are no differences between the corms of normal and abnormal flowers and a study confirms the idea of *Crocus sativus*'s sterility and also that extra stigmas are due to the intermingle of two or more flowers in it's spathe, these types of flowers are usually found in fertile soils and during the years of high production, rare flowers with more than 3-stigmas also have extra tepals and stamens that could confirm the idea of intermingling.

Chemical substances of Saffron corms: a Saffron's corm contains glucose and aspartic acid and glutamic acid, cystine and serine, glycine and threonine, tyrosine and alanine, arginine and histidine, lysine and oleanolic acid.

Saffron's corm: contains 6-amino acids out of 8-highly essential amino acids for our body.

Chemical substances of Saffron's tepal: a tepal of Saffron contains 7-percent of pigments composed by anthocyanins and flavonoids and contains glycosides in considerable deal. These pigments are found in plants vacuoles and are soluble in water and give a pale yellow colour.

Saffron's straw: is it's pipe-shaped stigma and the average production of Saffron straw per hectare is 1-ton, in matter of dry and organic substances and digestibility of dry matter for cattles a Saffron straw contains more of it in percentage compared to cereal's straw.

Saffron's cultivation: Some farmers plant Saffron corms from May to October but the best time for planting is in May or in August. The number of planted corms depends on the system of planting for example light and medium or heavy plantation and therefore it changes from 2-6-tons per a hectare. The corms planted should be healthy and weight more than 5-grams, distance between the corms in the row should usually be 25-centimetres, they require then a well-drained sandy or clay-loam soil.

The corms tend to rot in humid or waterlogged soils. Saffron thrives best in warm subtropical climate, therefore it could be planted in all parts of Iran except in tropical areas of Khuzistan (Southwest) and in the cold areas of Azerbaijan in Northwest. In early September the laboures try to spread 30-50-tons manure of animal per hectare and the first irrigation is done at the end of September. Second irrigation is 30-40-days after the first one and is done after the flowers have finished blooming.

Saffron's leaf: it's leaves shoot out from it's corms after the first week of flowering. Afterwards the irrigations are usually practiced within 12-14-days and When the



frost begins no more irrigation should be done. After the third irrigation the weeding and hoeing is performed. From the middle of March the vegetation growth is in its peak and irrigation should be done every 6-8-days.

From the end of April saffron leaves start turning to pale ones and later on to completely dry ones and by this time they are ready to be picked and then the saffron corms start their dormant period that lasts around 4-6-months.

Second year of Saffron's life cycle: starts again with irrigation in late September. Weeding should be done during its dormant period and near the first irrigation the spreading of manure is performed. After irrigation and spreading of chemical fertilizers the land is plowed to a shallow depth in order to loosen the topsoil for blooming Saffrons and same treatment should be done in the consequent years.

Saffron's Nutrients: any plant for its vegetative and productive stages needs nutrients, the nutritious elements needed for saffron are: 1: C, O, H; 2: N, P, K, S, Ca, Mg; 3: Fe, Mn, Zn, Cu, B, Mo, Cl, Na; 4: Co, V, Si, I, F, Al.

Group 1): could be supplied through air-and water. Group 2): or macro nutrients (or major elements).

Group 3): are micro-nutrients (or minor elements) is equally essential, is needed in much smaller quantities. Group 4): elements of this group are considered to be necessary for some of the higher plants (or uncertain elements).

N): nitrogen is a vital component of protoplasm and is found in chlorophyll alfa-and Beta, also in amino acids.

P): phosphorus is vitally important in energy storage and transfer, it is also a constituent of DNA, RNA, phospholipids, etc.

K): potassium is essential for photosynthesis and sugar translocation and enzyme activation.

S): sulphur is a constituent of three amino acids called for: cysteine, cystine and methionine and is also a component of vitamin's thiamine biotin from B-vitamin group.

Ca): calcium: is essential for plant tissue in the middle lamella or cementing layer, calcium pectate and is important also for growth of meristems.

Mg): magnesium is necessary as nitrogen for chlorophyll formation, also works as an enzyme activator of chloroplasts.

Elements of S, Ca-and Mg, are usually in the soil in sufficient amount and there would be no need for fertilization containing these elements.

Nitrogen and phosphorus and potassium are three major elements and deserve careful studies about: source and amount, time and method of application. Characteristics of animal manure besides its nutrients in comparison with chemical fertilizers is that animal manure and in our case cow dung is completely decomposed and improves the soil texture and prepares a better plant bed under the circumstances that they are



without any weed seeds.

Most farmers prefer cow dung for cultivated Saffron.

Chemical substances: Saffron's stigma is commercially known as Saffron and has a wide variety of usage in mainly food by virtue of its distinctive red orange colour, bitter taste and herbal aroma.

Saffron's chemical and main substances: are Crocin that is a strong yellow dye agent while picrocrocin and saffranal are its main taste materials, these materials are of glucoside types, it contains also minerals and resin materials, an essence and especial aroma and some medicinal factors with medical effects.

Dyeing properties: a large number of carotenoid pigments are both water soluble and fat soluble and have been isolated from saffron.

Saffron's soluble fat pigments include: lycopene and alpha-carotene, beta-carotene and zeaxanthin. Saffron's water soluble pigments include: carotenoid glucosides crocine is the most important one and on acid hydrolysis in absence of air yields crocetine and glucose, crocetine is insoluble in water.

Saffron gives a red orange nuance to foodstuff and fabrics and beverages. Saffron's bitter taste: depends on a dyeless glucoside is famous as picrocrocin and decomposition of it produces the volatile aglycaemia and saffranal.

Saffron's aroma: by distilling Saffron with water in a current of CO₂ and agitating the distillate in ether and evaporating the ether in an atmosphere of CO₂, essential oil is isolated with high mobility and is nearly dyeless fluid of terpene class, when having an intense aroma of Saffron and very prone to absorb oxygen, it turns to a thick and brown one or change to safranal.

Another way of extracting Saffron volatiles: is done by diethyl ether and for separating individual fractions by gas chromatography 12-volatile constituents have been identified and safranal has been also synthesized successfully.

Saffron's ash: minerals after ash analysis showed boron to be a constituent of the ash and besides 34.46-percents of K₂O, 8.56-percents of Na₂O, 10.01-percents of P₂O₅, 7.12-percents of SO₃, and 2.89-percents of Cl.

Saffron's vitamins: riboflavin (B₂-vitamin) and thiamine (B₁-vitamin) in content of Saffron are used in homeopathy by bleedings and as a tranquillizer and as a remedy for curing depressions.

Medical qualities: Saffron's containing bitter substances makes the function of digestion easier and also because of its containing essence has stimulative effect over nervous system, it has calmative effect over surficial nerves, is used as stomach strengthener, is used as a calmative (anodyne) in case of coughs and is especially used in cases of chronic bronchitis (respiratory way's catarrh) because of its anaesthetic effect over the end part of the lung's bronchus nerves but its effects of opening menstruation has been denied by Iranian traditional physicians.

Saffron's infusion and decoction: with water is an anodyne (calmative) against

toothache and a gargle or tasting as chewing of its infusion juice alleviates (soothes) toothache and when this tooth has been damaged by caries it will prevent its damaging process.

Saffron creates a mirthful and exhilarating sense and its odour is disinfecting and stimulates the nerve system in a low degree and has effects similar to ozone gas and creates laughs in weak persons, it strengthens the five senses (seeing, touching, hearing, tasting, smelling), is carminative, disinfectant and diuretic, is constipating and stimulates sexual ability and animalistic spirit for sex, it strengthens the liver and respiratory organs, drains the kidneys and makes facial complexion brighter, helps a delivery of pregnant women to take place easier.

Saffron's decoction with Honey: has the effect of breaking stones (calculus) and with proper spice is recommended for soothing the pain of the womb (uterus) and pain in buttocks (anal region).

Snuffing Saffron flower's odour: is useful for curing meningitis and is a little bit somniferous (soporific). Collyrium of Saffron: is useful for brightening the eyes and curing trachoma flowings and virulent ulcer (eye's ulcer).

Saffron's infusion drops: is useful against intensive headache and sleeplessness. Compress made by Saffron's infusion: is useful against wet eyes, eye's flowings and alleviation of irritated red eyes.

Saffron rubbed with purslane-tree (*Portulaca oleracea*. L.): is useful against gout arthralgia (pain of joints) and powdering its mashed dust over sores prevents bleedings and a vaginal suppository with its infused juice calms the pain of a womb.

Saffron with wine: consuming Saffron with wine intensifies intoxication and its disadvantages, having overdose of such wine darkens the senses and damages one's nerves. Saffron's straw: entering a stigma of Saffron in urine way stimulates and opens the urine.

Dose of Saffron: is 3-5-grams per day for adults.

Other qualities: its dye is also used in industries for painting, as spice in bakings and foodstuff.

Saffron's oil: one of the ancient medicines is oil of Saffron and for isolating Saffron's oil, 250-grams of Saffron is mixed in 3,5-litres of Sesame oil and Olive oil and after soaking them in 5-days while steaming it everyday it is refined and its isolated oil is called for Saffron's oil, the rest is kept after refining for their maintained similar medicinal effects as its oil.

Medical qualities of Saffron's oil: it mitigates nerves and cures the hardness of womb, is soporific (somniferous) and is carminative. Rubbing it around the nose-holes and using it as drops in nostrils has been recommended in treatment of pleurisy, rubbing Saffron's oil over body skin disinfects the skin and cures skin sores, it opens boil



(abcess) and pustules and has been recommended for healing infected chronical sores.

Saffron oil's suppository: Saffron's oil with wax and marrow of bone (lamb bone) is useful against sores. The quality of it's rest after isolating oil of Saffron strengthens the nerves and mitigates dry sores, is diuretic and disinfectant for the skin, it clears the effects after bruises, strengthens the eyes and brightens dark eyes.

Saffron leaf's medicinal qualities: it's leaves are useful for healing fresh injuries and are disinfectant. Medical forms: Saffron is used in forms of 0,5-2-grams in one litre's infusion. Tincture of 1/20-is used in dose of 4-20-grams. Saffron's dust is used in dose of 0,20-1-gram, etc.

There are two famous menstruative recipes, the first one is prepared by: 0,05-gram of Sabine's dust, 0,05-gram of Rue, 0,05-gram of Aloe, 0,10-gram of Saffron and 0,10-gram of Absinth, mentioned ingrediencies are used for each cashet and recommended dose of it is 2-3-cashets per every of the 5-days before an expected menstruation.

The second recipe is prepared by: 0,50-gram of iron's and potassium's tartarate, 2-grams Saffron dust and 2-grams of Cinnamon and mentioned ingrediencies are used for preparing one tablet, a dose of 2-4-tablets are consumed per every of the 5-days before an expected day of menstruation.

Potato. E.
 Solanum tuberosum. L.
 Solanaceae. L.



Potato: is a perennial plant with underground stems containing great deals of starch savings and buds that shoot out vertical air stems. Potato plant's air stems with compound leaves divided into 7-12-main leaflets are one of its characteristics in Solanaceae family.

Potato's flower: it's flowers are gathered as tight raceme with a shape of an umbrella, it's flowers bring no nectar, are bright purple, white or light yellow.

Potato's fruit: is generally round and is yellow green or green.

Chemical substances: one Potato contains 75-percents water and 22-percents carbon hydrates as amidon (starch) and glucose, saccharose and gum, 1,99-percent nitrate materials as albumin and asparagine, lecithine and proteose, tuberine and 0,15-percent fat materials as palmitine and myristhine, solanostearin and also solanic acid, etc., it also contains 1,09-percents mineral salts, it contains also organic acids and pheromones, different vitamins as B, B6 (equal to 0,2-milligram per 100-grams) and 0,3-0,63-milligram pantotonic acid, 0,1-milligram folic acid, it's new buds contain 0,04-percent solanin.



Medicinal qualities: green parts of Potato's plant as it's leaves and stem contain solanin with a narcotic sedative effect against neural and rheumatical pains, chonical lung-catarrh (lung-rheum), dry coughing and stimulative diarrhoea.

Potato has antiscorbutic (antiscurvy) and lenitive (laxative) effects, is a healthy food, is easy of digestion and is especilly useful for diabetic patients.

Raw potato: has calmative effect and is used in form of slices against burn injuries by applying slices of it over injured zone and replacing new slices repeatedly.



Boiled potato: mixed with plants containing resin is used as compress over inflammations and surficial skin irritations and is used in acute finger inflammation and bruises.

All parts of Potato's plant and especially its fruits contain solanin but its deal differs in different types of Potato and it also depends on its growing soil type.

A Potato contains generally: 0,002-0,010 percent solanin that is increased up to 0,058-percent when they are places in light to become green. Intoxication: consuming Potato when it contains 0,02-percent of solanin may cause intensive poisoning and consuming Potato buds or rotten Potatoes leads to same disposition, a Potato apart from green parts contains solanin in its cuticle layer around its buds.

Symptoms of being intoxicated starts with headache and vomition, gripes (stomach tenesmus; contortion of stomach) and general disturbances, in case of vertigo (giddiness, being perplexed, obfuscation), weakness of pulses and in some cases may cause even death.

Consuming Potato's flowers or leaves creates also intoxication.

Traditional use: Potato is recognized to have been coming from Southamerica and for the first time the Spanish sailors found it in Peru in 1550 (455-years ago) though it was brought to Europe and since then has been cultivated there but today it is cultivated in most of the countries around the world.

Potato's most useful part is its underground rhizomes because of its solanin content, Potato's flower and leaf do not have so many medical qualities as a Potato has, yet a 30-per mille decoction of its leaves and flowers is used as soporific (somniferous) and sedative (calmative) and the prepared decoction is also useful for curing rheumatism, weak nerves, pain in joints and when the prepared decoction is sweetened with Honey it is useful against infection of lungs and stomach.

Potato's solanin as poison differs from poison in other plants in Solanaceae's family and creates an emetic dispoison with opened eye's pupils and creates vertigo (is vertiginous), colic, diarrhoea and makes a facial complexion red and creates spasms. For treatment of an intoxicated patient the patient's stomach must be rinsed and the patient should have milk and eggs.

Toxic substances exists in all parts of its plant but lesser in Potato's rhizome but after budding will increase and characteristic of its toxic is the feeling of burning in throat despite the fact that in this position it is useful for curing eczema smarting and tranquillizes neurotical pains and stomach ache but one should prevent having of it anyway.

Potato is lenitive and because of containing 20-milligrams C-vitamin in 100-grams of it prevents anemia and sediton of blood (decay or deterioration of blood) strengthens the teeth and prevents their bleeding. Potato loses some of its C-vitamins because of being kept in stores or by cooking, when the skin of Potato is removed and then thrown in boiling water, it would only loose 40-percents of its containing vitamins,

when it is held in cold water and then boiled without removing its skins it would lose 50-percent of its C-vitamins, when its skins are removed and then doped in cold water for boiling it would lose 65-percent of its vitamins, its baked or staked one keeps their vitamins in higher proportion.

Potato besides its C-vitamin contains B-vitamin and phosphorus, iron and magnesium and calcium oxide.

Because of containing 5-grams of potassium minerals in 1-kilogram, it strengthens the heart and its starch materials are not harmful to diabetics and this group of patients can instead of having special type of bread have Potato, but because of the fact that cooked Potatoes lose some of their vitamins in its water, it is not useful for the diabetics unless by having some of its boiled juice (water) together with some of the boiled Potatoes.

Potato is recommended for patients with heart disease to fill the lack of potassium in their body. A diet with Potato: is done by consuming milk in 3-days and then having 1-kilo baked or cooked Potato with salt in 6-times and do not have other food, then during the third day when the urine is increased the diet should be ended.

The amount of starch is different in different types of Potatoes, a Potato contains 2-3-percent nitrate materials and 0,5-percent fat.

Worst kind of preparing Potato is when it is fried and one likes to have them with oil it is better to cook them first, remove their skins and cut them, mix them with some butter and then warm them, and when one wishes to use oil instead of butter it is better to use a vegetable oil hot and after frying hold them up so they would lose their oil before consuming. For preparing chips it is usual that after cutting they are rinsed in water so they would lose their starch and then are spread over a cloth or pieces of papers and after drying are fried in a vegetable oil, after salting they are then packed in pockets.

Potatoes old chips are not desirable to have and especially children should avoid having of them.

For sedating painful and inflamed skin over body zones, Potatoes are firstly boiled in water, their skins are then removed and while they are warm, are mashed and applied over damaged zones.

Potato increases sexual desires and strength of brains (intelligence) because of its content of phosphorus minerals (salts).

Another quality of Potato is increase of urine and in this way it drains kidney and urine bladder.

Potato's most important quality is its curing effect over stomach ulcer, because of having diastase and special enzymes drives the rests of imported things that are often the cause for stomach ulcer together with itself even though these would be made of metal pieces.



For treatment of stomach ulcer juice of a kind of Potato is pressured raw and consumed.

For filling up lack of C-vitamin, Raw grated Potato is mixed with salad and is prepared and consumed.

A salad is prepared mainly by Boiled potatoes is famous as Olive salad and is prepared by mixing mayonnaise sauce and boiled potatoes, Salted gourd cuts in pickles, Green round beans in cans, Carrots in cans, Boiled chicken flesh, Boiled eggs and little Raw grated potato for raising the C-vitamin content of the whole and finally some Capparis beans in pickles are applied over it together with Green olives.

Do not keep boiled or fried Potatoes a long time before having of them, because a kind of poisonous fungus can develop over them within a short time. In industrial world a kind of alcohol, an artificial Honey and starch are prepared from Potato. Adding Potato during the night as grated raw together with Walnut oil to a salad is useful against stomach and intestine's worms.

Potato's raw poultice: is a valuable and rare salve and Raw slices of Potato mitigates the inflammation of eyelids and cures cracks of feet and hands caused by chill (cold), sedates its burning sensations and pain. Potato in form of raw and grated mixed with Olive oil removes infected skin pimples and applying this salve over haemorrhoids and anal fistula is useful for their curing.

Raw grated Potato in milk: makes the best cosmetic milk for making the facial complexion and hand skin mild, it is recommended that by adding some Rose-water to this salve a perfect beauty milk is prepared.

When by accident a stew becomes oversalted it is a custom to add some Potato pieces for absorbing its excess of salt.

Some folks throw Potato skins in a Semavar or a kettle and boil them with water for removing their sediments fastened in them.

For opening abscess of a tooth mashed baked or boiled Potato while it is still warm is applied next to that tooth for sedation. When the bottom of a container for preparing food is burned, folks boils some Potatoes and pour the resulted milk into the container for removing the crusts.

Potato is used all over the globe today and has become one part of the food menus.



European bay laurel,
Laurel tree, Bay tree,
Sweetbay, Bayberry,
Roman laurel,
Roman berry,
Royal bay. E.
Laurus nobilis. L.
Lauraceae. L.



European bay laurel: is a dioicous (polygamus) tree that comes originally from Southern Europe and most of the Mediterranean areas. Bay has because of its evergreen leaves been cultivated in vast areas of Northern parts and other areas of Iran.

Bay's leaf: has single and odorous leaves and every leaf is a complete leaf with wavy dentated margins, sharp top and is usually 8-14-centimetres long and between 2,5-4,5-centimetres wide, its upper surface is green but is lesser green on its back side, it lacks down and is coriaceous (leather-like), its leaf's odour becomes more influential when they are squeezed between fingers and its taste is a little bit bitter and aromatic.

Bay tree's flower: its flowers are convened in form of a 4-groups covered in one involucre, its male flowers have 8-12-stamens but its female flowers have 4-steril (barren) stamens.

Bay tree's fruit: its fruit is a berry fruit with a round and elliptical shape and is white blue with the content of one oily seed similar to fleshy split peas, cuticle of its fruit turns after maturancy to violet colour and after drying its appearance turns to a rugose (wrinkled) one and it is then that its fruits can easily be made to powder.

Oil of Laurel: a type of green oil is extracted from its seed's dried powder by effect of steaming and successively pressing, its oil is strongly odorous and is famous as "Huile de Laurier" (Oil of Laurel).

Useful parts: of this tree are its leaves and its fruit.

Chemical substances: Leaves of European bay laurel contain tannin, a bitter resin material, pectic substances and an essence. Oil extracted from its fruit is strongly



odorous and is compounded by chlorophyll and amidon (starch), 1-percent of essence and little amount of resin. European bay laurel's essence: it's essence is yellow green with a sweet odour and is compounded by great deals of cineol, little pinene, eugenol and estragol.

Medical qualities: it's leaves were used in traditional medicine as perspirative and for curing catarrh (rheum) but today is consumed as food spice and for odouring some conserves as in salt Cucumbers for giving it a better aroma and taste. European bay laurel's leaf: it's leaves have been considered to have carminative (Carminativum, antifatulent) effect and contain great deals of emetic substances with diuretic, antispasmodic and menstruative effects.

European bay laurel's fruit:

it's fruit is as large as a Hazelnut and contains oil with delicate odour, it is commonly used dried and has stronger medicinal effect than it's leaves, formerly it was common to consume it for creation of appetite and weakness of stomach. European bay laurel's tisane: has been recommended for curing bad digestions caused by weakness of digestive organs (dyspepsia) and also against chronic bronchitis (respiratory way's catarrh). Formerly a kind of pomade was produced in veterinary works famous as "Pomade de Laurier" (Laurel pomade) and is still produced today. Bay's essence is used in cases of contortion (strain, twist) of joints, piles and curing rheumatismal pains in form of rubbing over and also used in soap industries.

Oil of Laurel is used in veterinary works for removing parasites and as a local stimulator of organs with bruises but despite the fact that it can be used by human beings with positive results it has generally not been used.

Medical forms: using it's leaves as an infusion of 10-20-per mille or it's half-mashed fruits as in form of an infusion of 5-20-per mille in doses of 2-cups a day after meals has been common in the past and some people still use it in this way.

Bay's tisane: a tisane resulted from infusion of 4-grams leaves and 8-grams Seville's dried peels in 200-grams of boiled water has been recommended to have strengthening effect. For preparing: leaves of Bay tree and dried peels of Seville are macerated in boiled water in 15-minutes, then it is refined and some sugar is added to it for making it sweet.

Traditional Use: Bay tree has a long life length of over 1000-years, it's leaf is odorous and, it's leaves are mixed in salt gourds (pickles) for giving them aroma and prevent the pickles from infection (decay) and it's leaves were formerly as today placed in packages of Figs and Dates for preventing them from worms.

European bay laurel tree: is a large tree and ancient Greeks respected it's tree by holding it's branches in their hands during the feast days and during their religious rituals, scientists made a crown with them and placed it over their heads.

Medical qualities: it's leaves are antispasmodic and opens menstruation, is carminative (antifatulent) and increases perspiration but overdosing it creates



emetic (vomitive) disposition.

European bay laurel's fruit: has stronger effect than its leaf and increases appetite, strengthens the stomach and has been ordained for treatment of bronchitis, its leaf and fruit are frequently used in veterinary works. Odour of its leaf and fruit is exhilarating (mirthful) and its fruit and leaf are antidote (against poisons), especially against food poison. Having of its macerated fruits in wine has been ordained for curing headache and epilepsy, scruple and for increasing memory.

Massaging (kneading) its fruits over body skin is useful against neurotical pains, tiredness and muscle bruises and opens entry of blood vessels.

Pouring drops of its rubbed fruits is useful for sedating ear pain, curing feeling of buzzing in ears and its heaviness, gargling its leaves' decoction is useful for sedating toothache, its mixture with Honey in form of an electuary or in form of tablet is useful against chronic coughs and asthma, its oil is emetic, creates vomiting, is diuretic and menstruative, having of its fruits reduces flatulent and stomachache, colic, liver and spleen diseases and its fruits mixed with Honey has been recommended against stomach and intestine's ulcers.

A deal of 2-grams fruit skins breaks kidney and urine-bladder's calculus (stones). Having of its fruits together with wine is useful against being intoxicated from insects, its fruit's poultice is useful to apply over the zone of insect sting.

Bay fruit's poultice: poultice made by its fruit together with flour is useful for sedating pulses and warm inflammations, pain in joints and rubbing it in form of mashed cures facial dark spots, freckles and skin traces. Dose of its leaves is 10-grams and for its fruit is up to 5-grams and having overdose of them creates vomition (emetic).

Growing zone: it grows in Iran's Northern areas, in Central province around Tehran, in Southwest of Iran in province of Khuzistan and is also cultivated in Southern Europe.



Alfalfa,
Lucern,
Medic fodder. E.
Medicago sativa. L.
Leguminosae. L.



Alfalfa: is a perennial plant and grows between 30-80-centimetres. Alfalfa's leaf: it's leaves are compounded by 3-dentated leaflets. Alfalfa grows wild in some of Asian and African countries around the Moderate-Zones.

Alfalfa's flower: it's flowers are large and are blue, violet blue or yellow blue in form of long racemes.

Alfalfa's fruit: in form of ocrea is scythe-shaped and is winded.

Honeybees are in found of it's flowers and bring great deals of odorous nectars from them and the prepared Honey is more valuable than other Honey prepared by nectar of other plant's flowers.

History: it has been used commonly for the purpose of feeding fourlegged large animals since the ancient times in Iran, it's seed was brought to Greece during 450-BC., after around 200-years later was brought to Italy and from there to Mediterranean areas as to France, etc.

Chemical substances: content of chemical substances in Alfalfa's plant differs depending on whether the function of analyze over this plant has been done over a young plant before blooming, in the beginning of flowering or after it's flowering time.

Protein materials in a young Alfalfa plant before blooming is more than in the beginning of blooming, on the contrary the amount of cellulosa, materials and carbon hydrates are lesser.

Chemical substances: Alfalfa's proteins: are arginine and histidine, adenine and phenylalaline, asparagine and cystine and it also contains saponin diastases with a sneezing (sternutatory) effect and cetenes, 2-dye materials, phosphoric acid and A, E, C-and K-vitamins. Alfalfa's C-vitamin content is between 230-280-milligrams that is twice more than Parsley's and 4-times more than Lemon's juice but it's A-vitamin in form of Beta-carotene is between 3000-5000-units in percents, the deal



of E-and K-vitamins is rather much.

Alfalfa's ash: there are some calcium oxide 3-times more than the deal of calcium oxide in milk, some deal of potassium and phosphoric acid, little deal of magnesium and iron (2-times more than Spinage), little dose of arsenic and silicon in Alfalfa's ash.

Asparagine: is compounded of altheine and asparamide, or agedoite and is an amino acid discovered during 1805-by researchers and exists in all parts of Alfalfa that grows in darkness.

Asparagine exists almost always in form of left oriented in plant's organs and it was extracted from *Vicia sativa* from Papilionaceae family by researchers, it is also found in other varieties of this family of plants as *Lupinus albus*. L., *Glycine hispida*. Maxim.

Arginine: is another amino acid resulted by dissolving proteins and has the effect of regulating ammonium carbonate and in some liver diseases it would increase it in body.

Cystine: is an amino acid that results through oxidation of cystine's alkaloid solution in vicinity of air and is found in urine after consuming it, it is one of the materials that produce hairs, a Horse hair contains 8-percents of it and is commonly extracted from it. Histidine: is another material with natural form of L-Histidine (or Histidine chloridrate) and is an amino acid necessary for growth of children.

Lycine: is also an amino acid and is necessary for growth of tissues but human body does not synthesize it.

Total synthesis has been taken place from piridine and adenine or Leco-4,6-aminopyrine is a material that has been mentioned as B4-vitamin and is found in vegetative and animalistic tissues in form of compound with niacinamide, phosphoric acid and d-ribose, one of it's constituents is coenzymes and neucleic acid and have been extracted from pancreas of cow and it exists also in Tea.

Adenine: with 3-molecules of water (trihydrate) becomes crystallized and adenine chloridrate with 0,5-molecule of water turns to prisma-shaped particles is used in inherital researches, is used in virus diseases and in locopenies (Loosing of white blood cells), etc.

Mesoxalic acid or ketomalonic acid and oxomalonic acid are hydrated and turned to crystallized ones in different forms and with 1-or 2-molecules of water.

Medical qualities: Alfalfa is an important plant in pharmacological world because it is rich in nitrate-materials and different vitamins that are very important in growth of infants and besides, because it contains a rather great deals of calcium oxide materials has positive effects in rachitism in terms of providing bone structure, especially in young animals. A famous physician could replace intensive effecs caused by lack of C-vitamin in body by feeding the patient some cooked Alfalfa and



also 30-60-grams of it's juice during 15-days.

When 5-percents of Alfalfa is added to Clover it can defy disturbances caused by lack of K-vitamin in animals as rabbit and hens.

Alfalfa's fresh juice: or it's thick infusion has positive effect in treatments considering malconstruction of bone structures.

Medical forms: 300-grams of dried Alfalfa plant is boiled in 1000-grams of water until it is thickened to it's half, then it is refined by pressing, then 900-grams of sugar is added to it and is made into a sherbet form. Doses of mentioned infusion's sherbet for infants is 200-300-grams per day.

Alfalfa is consumed as food instead of Spinage for example in China, Russia, America and Northafrica. Alfalfa is cultivated in all parts of Iran and is regarded highly by farmers and is planted in fields instead of leaving a field in fallow and by this increase the force of their field and after 1-or 2-years plant other grains as Wheat over their remained knotty rests. Alfalfa grow also in Wild form in Asia and many other countries in the world.

Warning:

One should consider that when animals consume Alfalfa in fresh and raw form it creates fermentation and cause their death and also it's content of saponin becomes the source of side effects and disturbances.



Garlic,
 Poor-man's treacle. E.
 Allium sativum. L.

Liliaceae. L.



Garlic: is a perennial bare plant and grows between 20-70-centimetres high, it's bulb is constituted by some Garlic cloves and are covered by white thin skin. Garlic's stem is upright and simple with leaves at it's lower part.

Garlic leaf: it's leaves are linear with tops that are leaned backward, are flat and are keeled on their underside, are asperifolious in their margins, are up to 12-millimetres wide and have a long branchy siliqua at their lower parts.

Garlics inflorescence: has few flowers in it's umbel with numerous sprouts up to 1-centimetre large.

Garlic's flowers: have long peduncles and 6-crown petals that are red white to green white and are 3-millimetres long, each flower has 6-stamens that are shorter than it's crown petals. There are two varieties of Garlic, one with white flowers and the other has rose-coloured flowers with more cloves but lesser bulk and the white flowered variety is mostly the cultivated ones.

Chemical substances: in parenchyma of inflated clove cut a sulphur glucoside can be observed that under effect of hydrolization is changed to especial essence of Garlic and lulose and also a pheromone that is a hydrolizer that is concentrated in endodermic sheat around it's groups of vessels, Garlic contains some inulin and there is a great deal of C-vitamin in it's wild variety (violet flowers).

Essence of Garlic: is prepared through it's distillation under effect of water and it's essence is a compound of sulphurs and polysulphurs of Venyle (polysolphor de Venyle. Fr.), alil and propylene of alil, a material in form of white prisms that lacks sulphur but has the characteristics of alkaloids.

Only 60-grams of essence is yielded from each 100-kilograms of Garlics, it's essence is a fluid with orange red to brown yellowish colour and when it is refined turns to a dyeless one with little smell.

Garlic's essence: is soluble in most of the stable oils and mineral oils and is insoluble in glycerin and propylene glycol, it's essence should be kept in closed bottles in form entirely filled without air spare and if possible in glass bottles or aluminium containers in a cool area away from light.

Garlic's essence is used as spice for flavouring foodstuffs.

Medical qualities: Garlic is used in form of raw, cooked or steamed in pickles and it



is also used in traditional medicine in numerous recipes.

Garlic has a disinfective antibacterial effects and is digestive, is an appetizer, is antibilious and is expectorant (humorous), it gives strength and is antiworm, it reduces the blood pressure, it is also regarded as anticancer plant and a remedy for the diabetics.

Garlic's external use: externally has an anti-inflammatory effect and heals sores after injuries. Garlic's disinfectant and antibacterial effects: are related to it's content of illilic or acroleine aldehyde in relation of 1/10,000,000-of antibacterial effect but lacks almost poison for the mammalia and therefore in traditional medicine cloves of Garlic are mashed and spread in areas where a patient is residing and also in the past history Garlic was used for preventing cholera, typhus or typhoid fever and during the epidemics Garlic cuts were rubbed over their bread or entered into their desserts, etc.

Researches (during 1921) showed that it is useful in curing lung gangrene and other lung diseases and for curing intestinal tuberculosis. Other researcher showed that Garlic is useful in curing simple diarrhoea and dysentery, inflammation of intestines (originated from nerves) and colics (gripes, stomachache), indigestion and it's side effects as feeling stomach heavyiness or sensations in stomach, also dilation of stomach and some others believe that Garlic is useful for curing indigestion during their desparation (barrenness).

There is no scientific convincing evidence that relates it's qualities to Garlic and only a scientist recognizes it's digestive effect to be related to secretion of bile created by presence of Garlic in stomach.

Garlic has effect in reducing blood pressure because consuming it causes dilation of arteries and capillary vessels and it seems that it has positive effect over movements and contractions of the heart.

The Chinese are mostly using Garlic and the rate of people dieing in cancer among them is lesser than elsewhere, this is one of the evidences for verifying it's anticancer effect.

Garlic is useful for elderly persons who may suffer from arteriesclerosis and prolongs their lives. Garlic is diuretic and therefore is used in cases of hydropisie (dropsy) and anasarca (tissue dropsy), for this matter a researcher recommended to have a mixture made by Garlic cuts in wine.

A researcher believed that Garlic is useful in curing nicotine intoxication because by consuming it disposition of relieve was observed in addicted patients who where suffering from the effect of nicotine in vessels and also in counteracting heart's disturbances and digestive difficulties.

Garlic has the quality of removing worms as pinworm and ascarid (helminth).

External use: it has disinfectant quality and can be used in dressing of gangrene and infective sores, it can be used also for just healing the sores, besides in cases when

there is no Mustard poultice, few number of Garlic cloves can be mashed over a cloth band and then used for making the complexion red.

Garlic's mashed form is traditionally mixed with oil or fat and is applied over cold tumours and foot corn or over some zone of the body for counteracting nervous and rheumatical pains, in these cases it's effect over the body should not be continued otherwise it may create skin irritation and even blister. One of the methods of curing arthritis and joint rheumatism is done by mashing few cloves of Garlic without their skins and apply them over painful zone and after a few hours mentioned poultice is removed and a paste of clean clay (argil) is placed over the same zone instead and is tied with dress for defying the disposition of irritation and pain of the mentioned zone. Garlic's Disadvantage: is due to it's unpleasant smell that is evaporated by lungs within a rather short time and it's bad smell can be neutralized with essence of Garden angelica (*Archangelica officinalis*. Hoffm., *Angelica Archangelica*. L.), or a half hour after consuming it a Grated apple is consumed mixed with a spoon of Honey, another way is to chew Parsley leaves.

Garlic should not be used in cases where complications in digestive organs takes place.

Warning:

Overdosing Garlic creates a fetid persistent smell in mouth and creates headaches, intensive thirst and weak sight and creates also other disturbances, it's enema in children irritates intestine's mucous and absorption of it's effective material through the intestines creates other disturbances.

Garlic is effective in calming crisis disposition of asthma, and some of the recipes available in some medical books are as in the followings:

- 1) Clove of Garlic are mashed and macerated in 250-millilitres of 90-degree alcohol in case of asthmatic crisis a cube sugar is held in it and is sucked mildly by the patient when needed.
- 2) 7-12-Pomegranate flowers are boiled in sufficient deal of water and a dose of 3-cups are consumed a day after refining.
- 3) 30-grams *Euphorbia hirta* is boiled in 2-litres of water until it is thickened to 1-litre, dose of it is 1-glass each time and 3-times a day.
- 4) Seville seeds are smoked and mashed properly and boiled in sufficient amount of water, little dose of salt is added into it and is infused, dose of this infusion is 1-cup a day before every breakfast in 8-following days.
- 5) An amount of 20-grams Parsley root is boiled in 1-litre of water and some salt is added to it, Garlic is consumed then in the morning and at the night.
- 6) 1-2-food-spoons of Castor oil is soluble in decoction of *Matricaria* and 1-2-cups of it is consumed during a crisis of asthma.



Medical forms: a decoction of 8-30-grams of Garlic in 1-litre of water or milk. Garlic's sherbet prepared by 100-grams of Garlic and 200-grams of water and 200-grams of sugar, dose of it is 2-3-soup-spoon per day. Tincture of one fifth percents and its alcoholature are used for disinfection of respiratory organs, its dose is as much as 15-60-drops a day (in 2-3-times mixed in sugar juice) and 30-drops a day in 3-4-days and is repeated 3-time's a month. For reducing blood pressure or using its inner muscular injection form in cases of disinfection of lungs its oily solutions containing 0,02-gram of Garlic essence in each cubic centimetre is used once per a day or once in every 2-days but in any case one should avoid to have more than 5-injections.

Traditional use: Garlic contains materials as ethereal oils with content of sulphur and foremost aliine and C-vitamin.

Garlic as medicine and in homeopathy is used against high blood pressure and respiratory organ's diseases and by disturbances in intestines and arteriosclerosis 1-2-cloves of Garlic are consumed per day in form of juice or in food.

Garlic is used in form of spice added in different types of food at home and is disinfectant and cures colds. Garlic's plant is similar to Onion plant with strong stinking smell. Garlic is consumed raw or boiled in food and peoples mix it in yoghurt during a cold disease by cutting some cloves into small pieces and salt a little bit and drink a few cups of it in a few following days. Garlic contains phosphorus and calcium, A-and C-vitamins and a fugitive material with the quality of killing microbes.

There are many different varieties of garlic but there are generally two wild varieties, one grows over the mountain areas and the other in desert lands.

Cultivated garlic has white flowers and its wild varieties have pink purple to pink colour.

Garlic's Wild varieties contain B-and C-vitamins in higher deal than the cultivated ones.

Garlic disinfects the respiratory and digestive organs and is effective against lung diseases, especially lung gangrene and whooping cough (Tussis convulsiva).

Garlic is a disinfectant for the skin and is used in form of compress or in form of dressing of a wound against bruises and dark sores, it is an appetizer, reduces blood pressure and the quality of its antimicrobe effect is remarkable against cholera, it helps digestive organs and drives undesirable humidity in stomach and intestine canals, it changes thick blood to a more easily flowing one, is diuretic, menstruative and is an antitoxin against the microbe's poisons and therefore it has a few effects against reumatism, it is preventive against diseases therefore it is used against infectious diseases (contagious, catching) as colds and else.

An old pickles of Garlic stored in 5-years purifies the throat and clears the singing

voice, it is useful against asthma and oblivion (forgetfulness), nicksplasm, tremors and several nerve diseases, it is also useful against pain in joints, ischias, gout and calms their pains and is used against thick slime (mucous), chills and colitis.

Garlic is a cure against intestine parasites and bloodsucking leech for example fastened in animal's throat as well as tapeworm and threadworm (pinworm).

For curing chronic fever and old sores that cannot be healed by other medicines Garlic makes wonder and gives remarkable results. Consuming Garlic raises facial complexion and when a pregnant woman have a little bit of it the complexion of her baby's skin would change to the better and it is remarkable that when a pregnant woman has little of it 3-days before delivery, her new born's mouth would smell of Garlic at birth. When having hard digested food, Garlic helps its digestion and has an absolute effect over inflammations and against kidney stones. A successive consumption of it makes the white hair fall off and new dark hair grow again instead, under the circumstances that the used Garlic has plenty of manganese in its content. Some farmers for this quality dig and place Cassava fruits in the ground and let them become fetid (purified, putrid) and later on grow Garlic over them because consuming such Cultivated garlic changes the white hair to black.

Mixturing mineral soil containing manganese as fertilizer gives same results as mentioned above.

Garlic is very useful for elderly persons and fatigue persons and increases also the memory's capacity and strengthens the heart's muscles.

For treatment of bile and calvities and also for removing warts and granulation (small eruption, papula) an infusion of Garlic juice is applied in form of a poultice and it is repeated until its result can be observed.

Garlic prevents fleas: it makes it impossible for fleas to survive in foodstore rooms and especially in case of cereal's preserving rooms.

Warning:

Having too much of it may cause effects in blood and eyes of pregnant women and persons suffering from piles because it causes the bile effects to be followed by side effects.

Garlic and removing of a leech: for removing a leech fastened in a person's or an animal's throat the Garlic must be grinded in a mortar with a pestle and then little amount of Vinegar should be added to it and then it is ready for gargle until the bloodsucker falls out. Garlic's salve: Kneading Garlic's salve mixed gently with Honey is useful against skin sores and pimples, hairfall and removing of darkness under the eyes.

Garlic's salve: is prepared by just frying Garlic in oil and then separating it from the oil that it has been fried in, Garlic's salve can be massaged over eruptions (fractures)



caused by freezing in hands and feet, kneading it gently when it is mixed with Honey removes black skin spots and is useful for the treatment of psoriasis and calvities. Taking a sitting bath in it's infused juice prepared by it's leaves and branches is diuretic, menstruative and makes the delivery of a newborn much easier.

Garlic mixtured with Honey: it is common to mixtured Garlic with Honey and salammonia (ammonium chloride) and also mixturing it with dry juice of Sprucen needle (Spruce, Spruce fir, var. Fir: a kind of Pine's needle shaped leaf) and use it as poultice over cracked ugly or hard nail helps the reformation of a nail back to it's normal shape.

Garlic's infusion juice: kills flea and is an insect killer and chewing it's leaves cures it's strong and stinking smell and especially when after consuming of it a cup of wine spiced with Basil is also consumed, it is useful for paralysed persons and especially when a cure of 80-days is done.

The 80-days cure that has helped entirely paralyzed person to walk normally again is done in a way that: the first day one clove is taken in form of infusion and for each day one more clove is added for consuming as on the second day of treatment the patient should have 2-cloves, on the third day 3-cloves and.... on the fourthieth day have 40-cloves in form of infusion's juice and 40-cloves is the highest limit of consuming.

Then this cure is continued in diverse course or reducement as counting backward from 39 to lower numbers and by reducing one clove every day until the cure is continued another other 40-days of the 80-days in diverse course. This method has been used by famous Persian physician Zachariya Razi in the past and has given miraculous results.

Notice that for mentioned treatment assistant of a physician is necessary for controlling the level of bile in treated patient's blood and stomach and for reducing bile in case of being high.

Fresh garlic: for treatment of diseases fresh Garlic is consumed while Garlic pickles are taken as "the older the pickles are the better they are in qualities and effects". Without a doubt it prevents cancer diseases and in fact there is no better medicine in matter of disinfection of urine ways.



Sweet marjoram. E.
 Origanum majorana. L.,
 Majorana hortensis. Moench.,
 Origanum majoranoides. Willd.,
 Labiatae. L.



Sweet marjoram: is a plant in form of a little bush and may differ in shape and life length depending on climatic conditions in its growing region as when it grows in warm areas is a perennial plant but when it grows around the Mediterranean is a biannual plant and when it grows around the Moderate Zones is an annual plant.

Sweet marjoram's leaf: its leaves are opposite leaves and are elliptical and lack dentated margins.

Sweet marjoram's flower: its flowers are small and are white or pink and are covered by 4-rows of bracts that are almost white. Existence of its bracts causes its flowers to generally create a round form.

Sweet marjoram's origin has not been recognized but it does not seem to be originated from Iran.

Sweet marjoram's air organs: have odour with an influensive effect and delicate tastes and create a sense of warmth, its leaves and flowering branches are used as medicine and are consumed for extracting its essence.

Chemical substances: containing chemical substances in Sweet marjoram are tannin and a bitter substance and an essence. Sweet marjoram's essence is famous as Oil of Marjoram and is extracted by distillation or steaming, it has a yellow green nuance and has an especial odour with mild taste.

Sweet marjoram's essence: essence is soluble in propylene glycol but is not soluble in glycerin, its essence contains 40-percents of terpenes, especially terpinene, terpineol and sabinene, etc., it should be kept in entirely closed bottle containers and must be kept in cool areas and away from lights.

Sweet marjoram's dry plant: contains 0,7-3-percents essence compounded by terpene hydrocarbures as alpha-terpinol, sironelol and linalol, its non fugitive substances



are fennel acids as caffeic acid, rosmarinic acid as much as the least 2-percents. Rosmarinic acid (labiatic acid): is a substance that prevents the lipid materials become oxide and hot, therefore it remarks itself among the medicines, in make up preparations and foodstuffs, it contains little amount of eugeneol, luteolol and common flavones.

Sweet marjoram's powder: it's leaves after drying are made to powder and are used as spice for giving the food a pleasant aroma and also strengthening and calmative effects and is diuretic, perspirative and as other plants in this family strengthens the stomach.

External use: it has healing effect on sores and it's essence is mixed for odouring soaps, it's leaves are inserted in the formulation of alcoolat and alcoolature de vulnéraire.

An infusion of 10-grams in 1-litre of water is consumed as calmative and tranquillizer, 25-50-per mille's infusion of it is consumed as strengthener in doses of 2-3-cups per day.



Cultivated Oat, Oat. E.
 Avena sativa. L.
 Gramineae/Graminaceae. L.



Cultivated oat: is a plant and grows up between 50-100-centimetres with long fruits that ends with two small tips covered in it's glumes.

Oat has been cultivated in Europe and in some Westasian countries and later on was transformed to other countries in the world. Botanist of our days believe that this plant has it's origin in a plant famous as *Avena fatua*. L., but in history of Oat written by botanists this plant is recognized that it has been growing since the primitive human beings, it has been stipulated that it's development has been done by Slavic and German peoples when the great wandering of Indo-Europeans took place. Cultivated oat: lacks skin (cover) and is one of the main food ingrediences for the German people in a way that even their beverage sacks are named by Oat.

Cultivated oat: contains mediumly 7-percents fat materials, 13,5-percents nitrate materials and 60-percents carbonhydrates, it's fat materials contrary to cereal plants are not concentrated in their embryo but are spread in entire body of it's fruit (seed) that has a fluid disposition with light yellow colour, it freezes in 3-degrees and melts in 80-degrees of heat. Fat acids in it's oil include 10-percents of palmitic acid, 50-60-percents oleic acids and 15-30-percents linoleic acid. Japanese type of Cultivated oat: has a characteristic caused by low molecule weight of it's fat acids. Disadvantage of Cultivated oat: is that it's seed's flour turns to acidic one within a short time but it can be mixed in other kinds of flour for preparing dough.

Despite of the fact that bread prepared by Cultivated oat's flour is hard of digestion but a kind of bread famous as Ecosse is baked by it. Cultivated oat contains also a kind of albuminoid famous as avenine or legumine.

Medical qualities: Cultivated oat has strengthening effect and is a diuretic, lenitive, calmative when it lacks outer skin and outer cuticle (*Gruau*. Fr.) has healing effect for curing sores and when it is boiled in milk or decoction of calf meat turns in to a food with strengthening effect and therefore for strengthening children and for recovering during convalescence period from weakness, it is useful for elderly persons and for patients with extreme weakness a yolk of an egg is added to it just



before it is ready.

A 20-grams decoction of Cultivated oat with it's outer covers has diuretic effect and is used for curing gout, kidney stone and hydropisie (tissue dropsy), strangury (obstruction of urine), kidney and urine-bladder's pain, itching and appearance of corns over body skin, sleeplessness (insomnia) and coughing, inflammation of throat and larynx, sanguine humor (haemoptysis), inflammation of digestive system and urine canals. Cultivated oat's flour: is smoked for it's lenitive quality and it's decoction is accounted as effective for curing constipation and is also used for preparing a liniment in external uses and treatment of piles, a dose of it's decoction is 2-3-cups a day in 2-3-following days every time before a breakfast.

Oat's cuticle: it's seed is used in confectionaries and liquor factories for odouring liquors, creams and chocolates.

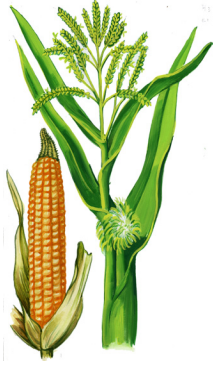
External uses: a poultice is prepared by Oat's seeds cooked in Vinegar and used in form of warm compress over body zones, over body sides, in lumbago (ischias) and for calming pain of catarrhs.

Dough prepared by Oat's flour mixtured with malt (fermentive factor of Barley's fermentation from *Hordeum vulgare*. Linn., or *Hordeum sativum*. Jessen.) that has been prepared in White wine is used for curing infected ulcers and hard healing sores. Decoction prepared by Cultivated oats straw (chaff): that contains A-vitamin has similar effect as the Wheat flour's poultice and can be used in form of local zones and for curing disturbances caused by gout, rheumatism, kidney pain, disorder in urine canals and curing skin corns.

Growing zones: Cultivated oat grows in Iran's Western areas and in Central province of Tehran, in province of Luristan: around Dorud city, in province of Khuzistan: around Pol-e-Kheyr-abad over heights of 450-metres, in 25-kilometres distant from Haft-kel city, in province of Fars: around Chenge-khor over heights of 2000-metres.



Maize,
Indian corn,
Spanish corn,
Turkey-wheat. E.
Zea mays. L.
Graminae/Graminaceae. L.



Maize: is an annual plant and grows up between 60-250-centimetres high.

Maize leaf: its leaves are long and top-sharp and grow alongside its plant, it has light red male spikelets sitting as spike panicles over its lower part of its main stem but its female spikelets grow next to its leaf axil and the middle parts of its main stem is covered by wide leaf rosette. Maize's spikelets after fecundation with pollen receive 8-12-rows of fruits. Maize cobs (fruits) may vary in white, yellow, dark brown, violet, black and dark blue or red brown colour depending on its specimen. Different specimens contain different chemical substances.

Yellow and violet Maize grains (fruits): contain 10-percents or more of albuminoid materials.



Some other specimens have more flour and contain 4-5-percents fat materials and nearly 80-percents starch. The dark yellow Maize grains (fruits): contain 58-percents amidon and 5-percents fat materials.

There are two types of waxes in the content of its fruit one is called for myristic ether and the other for tetra echozaloic acid.

Yellow colour in Maize's content depends on a substance famous as zeine zeaxanthine.

Maize straws (hairs): contain different mineral yones in form of potassium and



calcium particles, glucose, maltose and alantoin of sterol, saturated and none saturated fat of cerebronic acid.

Maize cob's straws (hairs): contain 28-percents sulphur and 36-percents chlor, 52-percents phosphorus and 40-percents silicon, 64-percents per mille iron and 17-percents calcium, 14-percents magnesium and 2-permillenatrium and 2,66-percents potassium and for it's high density of potassium it is diuretic.

Zeine: is used as plastic substance and for rubrication of papers in production of sticky papers and film and for covering foodstuff.

There is no gluten in Maize and therefore it is mixed with other kinds of flour used for baking bread, because of it's fat content it is used for treatment of the tuberculosis patients and used for common health.

Maize plant comes originally from Central America and Guatemala and has been cultivated in Mexico and Peru since the ancient times. After discovering North America it has been planted all over the globe as well as in Iran and other Asian countries, especially peoples in Yemen and Mecca still baking bread by it's flour.

Maize plants should be cultivated in a soil containing phosphorus and calcium. Maize cob's grains (kernels, seeds): contain glucose and sugar as in Barley, proteins, two kinds of waxes, starch, are rich in minerals in forms of metaloid, especially of sulphur, chlor, phosphorus, silicon, iron, calcium, magnesium, natrium and potassium.

Maize's content of sulphur and silicon, iron and calcium makes it a useful source of food for the nails and hair growth, it prevents hairfall and brittleness (fragility) of nails, it is the third ingredience included in Grains after Wheat and Barley and is the food for many peoples around the world, bread baked by it's flour is whiter than Wheat bread and is useful for tuberculous and diarrhoea's patients, it contains B-vitamins but lacks P-vitamins and therefore a successive consumption of it's bread without mixing of vegetables and fruits can cause psoriasis and skin diseases, similar to psoriasis.

A kind of Wine is produced in South America and Mexico called for shosha through fermentation of it's fruit seeds.

A type of fungus grows over it's corns with useful effect in obstructing bleeding. A kind of gelatine is extracted from it and is used as rubricating layer of capsules in pharmacological productions.

Maize cob's straws (hairs): contain some kinds of sugar that contains a great amount of potassium and calcium minerals, therefore it is the best medicine in matter of increasing volume of urine and besides is useful for curing kidney's and urine-bladder's infections in urine canals, inflammation of urine-bladder, rinebladder's cold, inflammation of kidnies and those having albumin in their urine by urinating, it is useful for heart disease and gout.

An infusion of Maize cob's straws (hairs): is consumed for driving the urine without



getting addicted to it.

Maize's oil: a kind of food oil is extracted from its seeds and consumed in cookings, its extracted oil is useful for persons suffering from excess of fat in their blood (or cholesterol excess in blood) because of its none saturerade acid in its content.

Maize's oil is used in industries for producing a kind of mild soap.

Maize cob's garins drive slime and blood coagulation concentrated in stomach. A boiled poultice by boiling Maize in vinegar is useful against eczema and other skin diseases.

Consuming its oil cures nervodermitethatisaskindiseaseofinfantswithsymptoms of smarting when it is consumed during 12-16-months.

SmokedMaizeflour:hasbeenrecommendedagainsttheinflammationofintestines and for its treatment an enema is used. Maize is recommended for those suffering from chronic constipation. Dose of Maize combs hairs: is 1-2-grams elixir in one portion or as in form of pills and juice containing 25-percent elixir in every soup spoon, or 30-100-grams of it, or 10-per mille tisane and 3-percent boiled juice. A kind of diuretic juice of Maize combs through mixing 25-grams elixir in 975-grams common juice and warm it until it is dissolved properly, the dose of this juice is 2-4-soup spoon per day.

Two recipes for treatment of kidney inflammation is as below related to the herbs and their's seeds: 1) Galium verum: 5-grams, Tilia cordata: 1-gram, Maize cob's straws: 2-grams, Equisetum arvense (Horse-tail): 5-grams, Sambucus nigra (Elder tree, Arn tree):2-grams and Rosa cannina: 5-grams. 2) Achillea millefolium: 2-grams, Gallium verum: 5-grams, Polygonum aviculare: 1-gram, Agropyron repens: 5-grams, Arctostaphylos uva-ursi: 1-gram, Hypericum perforatum: 3-grams. The recipes above are used in form of 10-per mille infusion and in alternating form as 3-cups a day in a way that the the first recipe it is consumed during a few days and then the other recipe in few days.

Traditional use: Maize has been cultivated mostly in the countries of Mexico and Peru.

After discovering of America varieties of Maize reached even to Asian countries and in the past fed the Arabian peoples especially people of Yemen and is still the bread prepared in Mecca of Saudi-Arabia is baked by Maize corns meal.

Maize's flour: Maize is cultivated today in most areas in the world and the land it is cultivated in should contain phosphorous and calcium.

Maize corn: contains Grape-vine sugar and sugar of germinated wheat, albumin, a kind of wax and starch and contains great deals of different minerals of metaloids and especially sulphate, chlor, phosphorous, iron, silisa, calcium, magnesium, sodium and potassium and women have appetite for it because content of its sulphur, silisa, iron and calcium helps the growth of nails and hairs, in other words it prevents



hairfall and brittle nails. Maize's bread|: prepared by Maize flour (Corn-meal) is more white and is useful for tuberculous and diarrhoea's patients.

Maize corn is reach in B-vitamins and the only disadvantage it has is the lack of P-vitamins that in the long terms person consuming only of it's flour and do not have of vegetables and fruits with their meal after a period of time are affected by false leprosy. Maize's hairs or female inflorescence: contains some varieties of sugars and great deals of potassium, calcium salts (minerals) and therefore is one of the best drugs for increasing the bulk of urine and is a useful drug for patients suffering from kidney and urine-ballader's stones, kidney inflammation (nephritis) and cures excess of albumin in urine, heart diseases and gout. Having of maize cob's female inflorescence (tuft of hair) in form of decoction or sherbet or in other form gives positive result for increasing urine and is one of the best medicines for this matter and is not addictable by consuming it frequently and is without any physical harm. Maize corns after consuming drive phlegm and solid blood and exit it from stomach, it's cooked poultice in Vinegar is useful in curing eczema and other skin diseases, an enema by it's baked corn-meal is recommended for curing inflammation of intestines. Persons suffering from chronical constipation that has not been cured after using other medicines should have of Maize corns and enjoy it's miraculous effect against constipation.

Onion. E.
 Allium cepa. L.
 Liliaceae. L.



Onion: is a perennial bare herb and grows up to 120-centimeters high with an upright stem and it's lower part is cylinder-shaped and steady. It's Onion's leaf: it's leaves grow only at it's base and is shorter than it's stems, they are blown pipe-shaped and are hard.

Onion's flower: it's inflorescence is a tight polyflorous umbel and is with or without sprouts, it's flowers grow during May to September (in autumn) with long peduncles, every flower has 6-crown petals that are double longer than it's flower petals. Despite the fact that Onion today is grown throughout the world but it seems that it originates from Iran's Baluchistan, Afghanistan and Palestine and via these areas has been brought to other areas.

During the era of Chaldea and Egypt Onion was vastly cultivated and has a certain religious respect and a kind of it with a large bulb and mild taste that was constantly cultivated constituted part of the food for the people. The ancient Greeks knew about the Onion in times of Homer and the Romans used it oftenly, but Onion was only popular as foodstuff and was respected religiously. Chemical substances: Onion contains an essence but by cooking loses it, Onion's medicinal effect is also related to it's sulphuric solutions and it's vitamins, besides it contains 10-11-percents of glucoquinine that is a kind of herbal insulin and contains also none crystallizable sugars, saccharose or maltose and citric acid, calcium phosphate, resin and sodium, potassium's minerals and inulin, quercetine and wax, it's leaves contain some sugar and different enzymes such as amylase, dextrinase, maltase and emulsion.

Medical qualities: Onion is a healthy vegetable that has almost all characteristics of Garlic in similar way as it is stimulative and because of it's C-vitamin richness is antisorbetic and is vermicide (vermifuge, antiworm), is a cure against diabetics and is used as disinfectant for it's antibacterial effect in external uses.

Onion's uses: depends on whether it is raw or cooked and there are Sweet Onions with mild taste that constitutes food of many peoples, Hot onion is mostly used for medicinal aims or is used cooked in food.

Raw Onion: for persons with a healthy and active stomach is an adequate food but according to a scientist patients with disturbances such as sensitivity of having of Onion and persons with inner bleeding backgrounds or skin diseases such as soda or else better avoid having of it.

When Onion is mildly cooked and butter is gradually added to it is useful against



constipation and flatulence and some believe that cooked Onion can reduce nervous dispositions and cure also arteriosclerosis, it increases the activity of stomach and at the same time increases the acid of stomach, it means that when a person has low stomach acidity can have of it without problem but in cases such as pyrosis that is when a patient's secretion of stomach juice is risen up to the gullet (Oesophagus) and creates feeling of burning or person with successively hiccups or persons with skin diseases should avoid having Raw onion with hot taste. Onion has diuretic effect and because this quality depends on diastases functions and especially oxidases and it must be used Raw or Fried just superficially.

A cycle of cure with Onion can cure hydropsie (anasarca, dropsy of tissues), edeme (general uprising of body) and even cure rheumatism to a certain level under the circumstances that the patient would not have liver disease or inflammatory case. A researcher has mentioned Onion as a remedy against kidney stones and announced this news (during 1937). Consumin Onion reduces urine's albumin and cures liver-cirrhosis, liver cancer, inflammation of stomach muscles and pleurisy from a critical condition.

Other investigations showed that in anasarca disease (tissue dropsy) when serosite fluid is concentrated under the skin tissues, by having of Raw onion instead of food and Onion soup with milk, a patient would be cured even when the origin of a patient's disease has been Mal de bright.

Cooked Onion: is lenitive and cures normal disturbances of breast.

Onion's thin slices: in milk is used for curing stomachaches and generally feeling of discomforties in stomach. Onion's boiled form in Honey: is recommended in cases of dysuria.

Permanent consuming of Cooked onion: regulates secretion of digestive organ, increases appetite and cures disturbances caused by flatulence and stomachache. For curing flatulence: a dose of 10-15-drops of Onion's tincture is used 2-3-time's a day with recommendation of being more useful than other medicines.

Onion has medicinal effects in both dispositions of acute and chronical bronchitis, cold in lung's bubbles, cures angina and coughings.

Two researchers have mentioned that Onion's sherbet has a sensible effect in curing nervous pains. Recent researchers found that Onion has a reducing effect on blood pressure meaning that Onion reduces the blood's sugar deal in percentage.

External use: mashed Onions has been since the ancient times a cure against dysuria by applying them under the belly.

Onion's pressured juice: has a positive effect in sedating discomforties caused by cutting oneself.

Onion's poultice: a poultice prepared by Mashed raw onion calms migraine (headache in one side of the head) by applying it over the forehead.

Half-cooked onions: sedates burn injuries and piles by applying them over the injured zones and when they are applied in warm form around the neck cures throat ache.

Onion cooked inside a warm ash: opens abscess and tumours by just placing them over the zones while they are warm.

Onion with fat of birds: mixture of Onion and fat of birds cures colds (chills) and surficial scratches over the skin.

Onion's decoction: Onion is very useful for dressing of infective wounds.

Cotton macerated in juice of pressed from Onions cures buzzing in ears by placing it in ears and also sedates sting of Bees by applying it over sting area.

Onion creates a useful effect in curing wrinkles of facial complexion, for doing so, 3-Onions are grated together with a kind of Lily called as *Hymerocallis arnicola* and 30-grams of white wax are prepared and warmed in a clay container until the wax is melted well, then it is steared with a wooden spoon and finally after bringing the container over from fire it is rested until it is cool.

The prepared pomade should be entered in another container and it's neck should be closed properly and only when necessary in the morning and during the night it is opened and the pomade is affect over the facial skin it is cleaned with a cloth after 5-10-minutes.

Medical forms: Onion's decoction prepared by 150-grams of Minced onion in 1-litre of water and some Honey. Onion's sherbet that has been prepared by 100-grams of Raw onions, 400-grams of water and 400-grams of sugar. Alcoolature of Onion prepared by equal amounts of fresh Onions and 90-degree's alcohol in doses of 14-40-grams. Onion's wine prepared in doses of 60-120-grams or temperately 3-soup spoons in the morning and 3-spoons in the evening is prepared as followings: 200-grams of Mashed onions and 100-grams of white Honey and 1-litre of white wine are prepared and first the Onions are mashed and macerated in white wine in 10-days, then it is refined and some Honey is added to it.

Traditional use: contents of an Onion are lacrymatory (make the tears run) substance famous as thiopropionaldehyde and ethereal oils with sulphur content. Scientists have accounted over a thousand of it's qualities for human beings. There are small and large specimens of Onions, strong and sweet ones and with different colours as white, yellow, red, etc.

Onion has an underground stem or stratum (torus, receptacle) and it's roots grow from the inferior part of it's receptacle under the soil, it's green air stems are shoot out from it's receptacle's superior surface, when Onion is riped it looses it's green leaves and it's bulb shape bulbuous leaves around itself and create the body of the famous Onion, it's bulbuous leaves with savings are covered by thin Onion skins from their inner parts and are harder than it's bulbuous leaves.



Some farmers are able to predict a cold or normal winter by testing the covering skin of Onion. During the autumn when Onions are drawn up from their soil their thick coriaceous hard skin would imply a cold winter in that area, but when the the skin of Onion is thin and milder coriaceous it implies a milder winter, it is also therefore the merchans are able to guess from where an Onion type is coming from for example from a cold or a warm area.

Onion is without a doubt a highly useful vegetable and is served raw or staked and are also used in pickles.

Onion contains: B- and C- vitamins and is rich in minerals as citrate and phosphate, nitrate and sulphur substances, calcium, natrium, potassium, iodine, silicon minerals and other sorts of sugar.

Onion has been recommended for persons working with their minds because of it's phosphorus content and digests substances such as starch and is useful for curing insomnia (being unable to sleep). Because of sun ray (solar-ray) and atomic ashes, air pollution and the noise of the cities a person should use a lot of Onion for preventing a heart-attack and brain-bleeding because Onion prevents bleeding diseases and minimizes the damage of air pollution.

Onion contains a kind of killing substance against bacteria similar to penicillin and kills choleroïd type of microbes (pestitential, like cholera), kills the bacills that causes decay of meat and neutralizes their poisons, it is therefore the cooks keep their meat together with Onion and no one is making food without it.

Having Onion boiled or raw in meals helps a child's growth and especially when the child is not developing normally.

Onion is recommended for purifying blood and respiratory canals and for treatment of asthma, inflammation of the throat and bronchitis (respiratory canal's catarrh) because of it's sulphur content.

With help of it's sulphur content strengthens the skull and facial hairs and prevents hairfall.

Effects of Onion in matter of kidney diseases is valuable and are cure for prostate problem, bone inflammation and joint rheumatism, it helps the digestion of food and heals inflammations (swellings, tympani) but are flatulent in stomach and for neutralizing it's gasses one has to use sweets or sugar substances.

For calming down the toothache it is usual to press some of the Onion leaves in a cotton piece and lay in the damaged tooth.

For treatment of fleshy warts an Onion is cut and salted and when the salt is melted it is rubbed over the wart, this is even effective for removing dark freckles.

Onion contains several types of sugar and with the help of nitrates increases the flow of the urine. Onion's effect on liver diseases (livercirrhosis) and cancer is undeniable. It has been recommended for treatment of the heart's outer membrane



and pneumonia (inflammation of the lungs).

Onion neutralizes the smell of meat and opens the nostrils that has been tapped because of dirty air.

Onion contains a herbal insulin and inulin and is therefore useful for diabetics and reduces their blood's sugar.

Onion is consumed for treatment of water excess in stomach and albumin in urine and is diuretic.

Onion contains some deals of sugar and different enzymes and very much of chlorophyll.

Half-boiled onion: is useful for calming down tensions and burn injuries and piles. Onion makes the tears running but disinfects the eyes and reduces the eyes pressure but does not harm the eyes.

Onion with bread: increases the flow of urine and dissolves the kidney and urinary bladder's stones (renal calculus).

Boiled onion: has higher content of nutrients and softens the stomach, cures sour bleaching and with animal ghee cleans the respiratory ways.

Onion in pickles: is used for treatment of jaundice and for increasing appetite and ability of digesting food and for preventing bile and excretions (humor, plexus, sputum).

Onion and Onion juice: are antitoxins and have been recommended by physicians for persons bitten by a rabid dog (hydrophobia).

Onion's juice drops: in eyes prevents rheum (running eyes), smarting of eyelids, mitigates an eye sore and cures the sight weakness. Snuffing Onion's juice: from nostrils rinses the respiratory organ's ways.

Smelling on Onion during the epidemic periods has been recommended.

Dropping it's juice in ears cures buzzing in ears and purifies infections.

Dose of Onion is accounted to be around a 100-grams.

Mashed onion's poultice: over scorpion and bee sting cures the effect of their poison.

Poultice of Onion sucks blood towards the skin and raises it's complexion. An Onion poultice with Honey and slice of bread: cures aphtha (thrush) and removes warts and freckles and cures infected sores.

For removing the warts it is recommended to use a poultice made by Onion, Honey and Rosewater.

Onion poultice with a yolk of an egg is useful against piles. Boiled onion with animal ghee is useful for treatment of a foot that has been pressured in a shoe.

Warning:

Persons with high blood pressure and excess of sodium are allergic to Onion and should use boiled Onion or drink some drops of Vinegar or Pomegranate juice after consuming Onion.



For curing the smell of Onion after consuming one has to have some odorous vegetables or Broadbeans or smoked Walnut or burned bread.

Another way is done by using schallot (Ashkelonian garlic) in yoghurt after having Onion.

Consuming Onion seeds strengthen the sexual power and can also be consumed for difficulty of hair growth and calvities.



Citron,
 Citrus, Lemon,
 Etrog, Esrog. E.
 Citrus medica. L.,
 Citrus limonum. Burm.,
 Citrus limon. L.
 Rutaceae. L.



Citron: is the famous fruit of a shrub that in normal conditions grows up between 2-4 metres high with young and edged branches and strong thorns in its leaf axils that gradually turns into a round shape.

Citron's leaf: its leaves are scattered or spread leaves and are coriaceous, every leaf is 16-centimetres long and has elliptical-shape and sharp top, is wavy shallow saw-shaped or pricked straight leaf with thorns or with effects as holes remained from a needle

tip. Citron's leafstalk: Citron's leaf may have leafstalks in form of narrow wings or be without it. Citron's flower: its flowers are gathered in one or few flowering racemes from its leaf axils and have 4-5-short sepals and 5-petals with white upper parts, redish or striped at their lower parts and there are 25-40-stamens inside every flower.



Citron's fruit: is shaped as 6-12-centimetres long fruit with ovated or almost round shape and contains 8-10-fruit carpels inside it and over its wart-shaped shoots. Citron's fruit skin: is yellow and has several holes but there are Citron types with smooth skin, Citron's content is similar to content of an Orange or a Lime fruit with thin covering membranes covering its fruit cloves, every clove carry its seeds attached to its inner flesh inside its membrane and its flesh is juicy and sour, it contains ethereal oil and coumarine derivate, bitter substances and hesperidine.

Lemon's fruit: is different from Seville by its skin colour and shape, aroma and high content of citric acid. Lemon's flower: it has pink red flowers. Lemon's leaf: its leaves have no wings. Lemon juice: has been used during a long period of time and has been consumed as a reliable remedy against scorbutus (scorbatic, scurvy) because of its high content of C-vitamin.

Lemon is commonly used for its juice and for making marmalade and its skin has been used as spice.

Lemon as medicine is used for its flavonoids as hesperidin that is used in cases of vascular disorder and for curing influenza and similar diseases caused by cold



(chill).

Lemon (*Citrus medica*. L.; *Citrus limon*. L.; lemon, lime. E.), sweet lemon or limett (*Citrus limetta*. L.), Seville (Seville: Bitter or Sour orange. E., Am.; *Citrus aurantium*. L., *Citrus amara* or *Citrus bigardia*. L.); Orange (*Citrus sinensis*. Osbesk.), Sour lemon (Egyptian small lime, *Citrus citronella*. L.), Mandarin or tangerine (*Citrus unshiu*. Marc., *Citrus nobilis*. L.), Large lemon or Pompelmus, Adam's apple, Siberian crab (apple) called for Cherry-apple (*Citrus maxima*. L.), Grapefruit or Paradice-apple (*Citrus paradisi*. L.) and other specimens that are grafted ones have common characters in their effects on body organs.

All mentioned plants have differences in shape of their leaf and flower, flowerbud, fruit and stem and their plants have their differences but their fruits and parts of their plants have similar medicinal effects.

The grafted specimens have a more fresh appearance and have better taste but the effects of the original ones are higher, they may prevent a disease but do not cure a person after illness and only help the body cells with more energy.

The grafted fruits contain: A-, B- and a great deal of C- vitamins and their content of minerals are twice as much as in Sour lemon and Water lemon but lack other sour substances that are useful for persons with stomach or intestine sore and does not harm the nerves, besides they contain more of P- vitamin than other fruits and P- vitamin with help of radio-active ray opens the small veins and help to clean the coagulation layer that is the foremost factor of growing older.

Orange has the reputation as the youth's elixir among the people in Iran. Northamericans researchers have recently found a new vitamin in Citrus fruits that strengthens the nerves and has positive effects on muscles and development of the body, it cures also paralysis (palsy) of children and stops aging (grow old) and is used in treatment of respiratory organ's inflammation together with pain and infection caused by colds (pneumonia) and prevents cancer, mentioned vitamin is considered to be found mostly in Lemon. Lemon as other fruits in Citrus family contains different minerals of calcium and iron, magnesium and natrium, phosphate and potassium and minerals containing sour substances without the effect of turning the blood to a sour one, on the contrary it turns the blood to an alkalic one and cures rheumatism, gout and arteiersclerosis, and is used for curing overweightness, varices, ischias and joint pain (arthralgia).

Orange. E.
 Citrus sinensis. L.,
 Citrus aurantium. Risso.
 Rutaceae. L.



Orange: is the popular fruit of the Orange shrub similar to a Seville shrub with narrower winged leaflet (leafend) but Orange fruit tastes sweet and a little bit sour compared to a Seville's sour fruit tasting fruit.

Orange's essence: is extracted before it's fruit is completely ripened and has yellow colour and more of the darker colour, it's essence has a delicate sweet and mild odour and turns quickly to a rotten one with a strong and burning taste and therefore it is common to use fresh essence of Orange and keep it in cold and dark space, it has disinfectant and expectorant effects, is used in antiseptical salves and is also consumed in odours and health lotions.

Orange's fruit: has a delicate taste and after consuming it replaces the metaloids of the body and increases the body's natural outstanding (resistance), is diuretic and purifies the blood and turns it to a soft one and is effective in treatment of anemia and lack of food digestion's ability, has a fundamental effect against toothgum and inflammation of mouth. External use: rubbing it's juicy fruit's flesh over the facial complexion prevents facial wrinkles and women wash their make up by it's juicy fruit flesh for care of their facial complexion. Children not being nursed should be fed by 2-3-Coffee- spoons of Orange's sweet juice every day.

Orange and overweightness: Orange reduces weight despite of it's sweetness and for preparing a cure: 1-orange and 3-Citrons are cut in small parts and are boiled in 10-minutes in a half litre of water and 2-spoons of Honey are added in it and then is boiled in 5-minutes again and after it is refined a dose of 3-small cups of the cold and prepared juice is consumed in one day.

Orange peel's electuary: an electuary of Orange peel is used for giving a pleasant odour to juices, potions and Lemonades. Orange has been dedicated a title as "the king of the Citron fruits".

Orange contains: B-and C-and P-vitamins, it contains Carrot acid that turns to A-vitamin in liver, Orange with red and other colour of fruitflesh has more of Carrot acid than the common Orange specimen.

Sour and Sweet orange: both the sour and the sweet types can turn to sweeter ones when they are not picked until they are fully ripened. Sourness of a sour Orange is more than the sourness of an Apple and wine and contains around 2-percents citric acid. Sourness of Orange as the other Citron plants strengthens the bones. Orange comes

Miracles of Herbs



originally from China and because of the China-Wall was not planted elsewhere but during the Crusaders was brought by the Europeans and a 100-years later on was grown in Iran.

Because of it's content of P-vitamin it has the reputation as "the youth's elixir" and prevents blood infections, thrombus (embolism) and it's C-vitamin's content prevents anemia, Orange juice is essential for infants being nursed, for elderly persons and person's in convalescence period.

Orange: has been recommended for women to remove their facial make-up with it's juicy fruits and for preventing the shrinkage and for maintaining a fresh and mild facial skin.

Orange and other Citron fruits: have been recommended to be consumed mostly during a winter when the blood turns to a sour one caused by insufficient perspiration.

Growing zones: Orange and many of it's grafted forms are cultivated in Northern and Southern parts of Iran from East to West.



Strawberry. E.
 Fragaria vesca. L.
 Rosaceae. L.



Strawberry: is a very thin and little plant and as the word straw indicates it's few stems or branches and are similar to herbal straws with vertical and horizontal dispositions, it grow up between 8-15-centimetres and it's flowers gows at the top of every straw.

Strawberry's leaf: it's leaves are compounded of three leaflets with dentates margins and are extended with long leafstalks.

Strawberry's flower: it's flowers are regular and are white and gathered in 2-to 5-flowers together and every flower's cup (calyci, calice) has several stamens, five green lobes and 5-counter sepals, it's calice (flower-cup) and it's counter sepals are remained even after it's fruits are picked in the cover of it's flower. The fruit of Strawberry that we consume is the Strawberry flower's receptacle that is covered by sepals and turns gradually to a fleshy one by saving great deals of glusides.



The real fruits of Strawberry's plant are those small dark seeds over it's fleshy part, every real and small fruit is consumed together with it's fleshy receptacle, every fruit is an achene (akene) fruit and contains only one seed. Wild strawberry: it grows wild and because of it's useful and delicious fruit is is cultivated in the gardens as well.

Useful parts: are it's rhizome and leaves and it's fruits. Strawberry's rhizome contains: 10-percent stannin and a glucoside famous as fragariarin that after consuming turns the urine to rose colour and feces (excretion) to red.

Chemical substances: are different according to their specimens and the time of collecting the crop and that whether or not they are riped fruits.

Strawberry contains: in average 81-87-percents water and 3-13-percents glucose and 1,10-percents free malic acids, citric and vinic acid and lactic, 5,3-percents fat substances and great deal of C-vitamin and very little amount of A-, B-, E- and K-vitamin, it contains also minerals of iron and sodium, phosphorus and manganese,



sulphur, calcium, silicon and iodine elements, etc. Strawberry's seed contain: 14-19-percents of oil substances similar to linoil. Leaves and rhizome of Strawberry: have diuretic and constipating (styptic, astringent) effect and infusion of it's leaves is consumed in form of preparing Tea and for it's diuretic quality.

Strawberry leaf's decoction: a decoction of it's almost old leaves and it's rhizome is prepared and after after being thickened because of it's content of tannin has a definitive constipating effect. Strawberry's tea: a type of well odoured Tea is prepared by it's leaves after adding Cinnamon and Vanile and infusion of it's leaves as Tea has the quality of tranquillizing and purifying the blood.

The ancient world's physicians used Strawberry more than today for curing simple diarrhoea and dysentery, common bleedings and existence of blood in urine caused by diseases in the urine ways and cures also the nightly perspirations. Consuming Strawberry for curing renal diseases as kidney stones (nephrolith, calculus) and urine canals, piles and weakness of the stomach functions, asthma, weakness of nerves and gout, rheumatism, tissue dropsy (anasarca) and development of skin granulations (papula, small eruption), etc.

External use: a decoction of it's rhizome and it's leaves is useful against angina and it's lotions are used for healing cold in body and it's enema is used for curing simple diarrhoea by folks.

Strawberry's fruit: has a delicious taste and is an appetizer with a calmative effect and because of it's lulose content consuming it by diabetic makes no harm to them. Strawberry is effective for strengthening the functions of intestines and curing chronical constipation, it's juice is antibacteria especially against typhoid's bacills when the typhoid bacills (anti-typhemia: against existence of the bacills in blood) are entered in as much as a quarter of Strawberry's soft juice they will be killed within a few hours.

Consuming Strawberry gives useful absorbable mineral elements as calcium, iron and phosphorus to C-vitamin in body and therefore consuming it's fruit is useful for the patients suffering from tuberculosis, anemia and persons being well after a disease but still spend their convalescence period. Strawberry contains great deal of C-vitamins and therefore has strong anti-scorbutic effect and after consuming Strawberry the disturbances caused by lack of C-vitamin would disappear. Consuming strawberry with all it's benefits may create discomforties as bad digestion in persons with weak nerves and increases discomforties in persons having skin diseases as eczema or nettle-rash (Urticaria) and it happens also that a person with skin diseases has consumed it and the discomforties were increased but was cured after a while, some others may also be allergical to Strawberry and vomit it after consuming. The source of this allergical sensitiveness as consuming eggs and conserve or else has not been found yet.

There is a belief today that the dust covering the fruits may cause this sensitiveness

and therefore sensitive persons are recommended to consume Strawberry after washing and locating them in sugar juice or wine.

External use: it has been common to shower the skin with its juice since the ancient times or apply Strawberry fruit pieces over the body skin for removing the skin freckles and spots. Strawberry fruit's effect: has been verified today in the matter of caring of the body skin and the Strawberry juice is consumed for filling the wrinkles and for making a white bright skin.

For doing so, some fruits are mashed and applied over one's face before the night sleep and by massaging to it a few minutes mildly and rinse it in the morning with water or infusion of a plant famous as *Anthriscus cerefolium* (L.) Hoffm.

A decoction of 20-50-per mille of Strawberry's leaves or its rhizome is consumed as medicine.

For external use: a decoction of 40-50-per mille prepared by Strawberry's leaves and rhizomes is used in forms of gargle and washing lotion, etc.

Strawberry as medicine: in matters when the Strawberry is consumed as medicine, it is better to consume 300-500-grams of it during a day or mixture it in 0,5-litre of milk.

A kind of marmalade of Strawberry and Cherry, Raspberry and Grapes is produced by mixing 1-kilogram of each one and by adding 5-kilos of sugar, the boiling is done with a low heat until it starts boiling in 5-6-minutes and then it is located in an earthen jug in mild warm climate in 3-4-hours and then its location is changed to a dry space.

Traditional uses: Strawberry has been growing in the Northern parts of Iran in forests since the ancient times as in Tankabon, Ghara-Dagh and Hassan-Begloo areas.

Strawberry's fruit contains: some varieties of sugar and albumin materials, little deal of fat and materials such as calcium oxide, iron, magnesium, iodine, brom, phosphorous and great deals of potassium that makes a solution with some herbal sour materials and turns to alkaloid salts (minerals). Consuming Strawberries: reduces sourness of the blood and turns the body's environment to an alkalic one, traditional people believe that when a woman consumes Strawberries a few hours before a sexual intercourse the secretion of womb's opening (orifice, mouth) turns to an alkalic one and drives the female producing chromosomes and exit them and by that provides the uterus for development of a boy.

This method has been practiced since the ancient times in Iran and has given positive result.

Rubbing Strawberries over body skin and taking a Strawberry bath is one of the secrets of women with beautiful skin fragrance.

Strawberry strengthen the heart and cures bilious inflammation and is one of the best antibilious remedies, it refines the blood and is a valuable food for persons



with bilious temper and has been recommended for curing skin diseases such as scab, it cures shortness of breath (asthma) and is a remedy against dry coughings, cures itching and haemorrhoids (piles) and it's effects are generally similar to that of the Raspberry. Strawberry's underground stem: is cylinder-like and it's outer skin is dark, it's pith is red and therefore consuming it turns the urine and residues to red colour.

Strawberry underground stem's decoction: a 20-per mille's decoction of it's underground stem is constipating, antidiarrhoeatic and is a diuretic.

Strawberry constains: mineral salts with lenitive effect on breast and stomach and together with it's cellulose increases the peristaltic motion of the intestines and helps the digestion.

Strawberry's underground stem: contains iron and calcium oxide and salicic acid and therefore is calmative and antifever (antipyretic, febrifuge) and is useful for persons suffering from gout and liver diseases, it breaks the kidney stones and urine-bladder's stones and is a fine cure for rheumatism, of it's magnesium content is a break for cancer and turns the blood to an alkalic one and in this way prevents a cancer disease. Strawberry's sugar: is similar to Mullberry's sugar and is useful for diabetics. Strawberry is a fine cure for arteriosclerosis.

Strawberry's leaf and underground stem: are disinfectants and decrease blood-pressure and soothes kidney and urine-bladder's disturbances. A kind of sherbet and marmalade is prepared by it's berries and is the most popular one in the world.

Traditional use: most traditional medicines shops sell Mullberry in Iran and Strawberry belongs to the modern time's medicine. Mullberry is the Iranian fruit and original home of it's shrub or large tree is Iran and has been transfered elsewhere in the world since the ancient times.



There are 4-types of Mullberry fruits produced by it's different specimens as Black and White, Yellow-and Pink-coloured fruits with sweet and delicate taste, another specimen in this family with same features but with sour and constipating fruits is famous as the King mullberry in Iran (Shah-Toot. Pr.) that will be presented in the followings.

Another type of Mullberry brings black purple fruits and having of them turns the residues (excrements) to it's own colour as well, it's fruit is sweet and delicate, it's leaves are collected for development of silkworms and the best type of leaves are picked from a male tree. White mullberry: it's white fruits are dried and mixed in nuts and other sweets and despite of it's sweetness it's sugar is not harmful when it is consumed by diabetics. Persons suffering from overweightness should have of White mullberry fruits without any fear of adding weight and have a cup of Tea with them instead of sugar because Tea prevents their appetite for food and white berries



do not increase their weight.

Dry or Fresh, White or Black mulberries are lenitive and diuretic, purify and neutralized dryness of brains, are the best medicine for the liver, spleen and strengthen physical and sexual powers.

Decoction of Mulberry's bark and root and leaves: is diuretic and increases the urine bulk and juice of its leaves is used as antifever (febrifuge or antipyretic) and heals sores and has been used oftenly for the mentioned matters.

Mulberry root's decoction: is a very useful medicine for removing a tapeworm and especially when it is mixed with leaves of rough variety of Peach in equal deal and both deals are boiled together.

Mulberry's dye: by cutting root of Mulberry a kind of secreted water can be saved and then it is boiled with distilled water and Grape-vine leaves and Black figs and after boiling when it is refined it has a form of a thick fluid that is the prepared dye.

Water from its root is a strong purgative (laxative) and especially when it is cut in the beginning of the night and all secreted water is saved from its root during the night. Mentioned water is useful against toothache and opening of tooth gum's boil (abscess).

Mulberry bark's resin: has similar qualities. Rinsing one's mouth with decoction of its leaves and chewing gum of its trees bark is useful for stabilizing attachment of tooth to their roots and for preventing tooth decay (caries).

Leaf elixir of Mulberry: is a strong antidote and poultice of its unripened fruits with Vinegar is useful against contention (cutaneous quitter, schism).

King mulberry: is a cultivated specimens and its fruit is sour with constipating effect and is the best antibilious remedy.

King mulberry's fruit contains: contains A- and B- vitamins and is also useful against throatache and palate inflammation (inflated roof of mouth) and inflammation of toothgums.

King mulberry's bark and root: was formerly used as antiworm.

Leaf of King mulberry contains: an antisugar material that cures diabetes and reduces blood's sugar. King mulberry's fruit: is very useful against bloody flux (dysentery) and inflammation of intestines. King mulberry's dried fruits: are grounded and used instead of Sumac powder as food flavour. King mulberry's marmalade and inspissated (thickened) juice: is prepared by its fresh fruits.

Syrup (sherbet): a kind of syrup is prepared by its fresh fruits in Iran and is used in form of drinking for cooling the body.

Growing zones: Strawberry grows mostly in Northern areas of Iran and especially in some of the Elborz-Mountain-Chain's feet and is cultivated sporadically in large gardens and grow also in Wild form in Western and Central Iran.



Raspberry. E.
Rubus caesius. L.,
Rubus idaeus. L.
Rosaceae. L.



Raspberry: is a perennial spinous type of plant with bow-shaped thorns and bush like appearance and it's fruit as Strawberry's fruit contains great deals of C-vitamins and sugar, citric acid and gall-apple acid and therefore it has a delicate sour taste and because of it's great deals of minerals (salts) turns the blood to an alkalic one and neutralizes the blood's sourness. Raspberry is a fruit with a very cold temper but cures humidities of the body and closes the microbes possibility to enter in the blood-vessels, it also prevents bleeding and blood decay and cures anemia. Raspberry is lenitive and creates appetite and increases the urine, drives bile (gall) from the bowels and is a calmative against bile, it is the best remedy against rheumatism and arteriosclerosis, is a fine food for persons suffering from stomachache and prevents skin diseases.



Raspberry's sugar: is useful for diabetics and a is cure for diabetics, it cures asthma and also shortness of breath. Raspberry sherbet: is very useful for persons affected by fever and measles, chicken-pox and gargle of it's decoction is very useful for curing throatache and angina.

Raspberry's oxymel: is prepared by it's berries and has a cooling effect, is useful for curing jaundice, bilious inflammation and liver inflammation.

Raspberry: strengthens the womb's visceral (entrails; bowels).



Raspberry leaf's poultice: is useful for curing cold sores and eyes pressured outward from their eye-sockets.



Raspberry leaf's and underground stem's elixir: that have been cut and picked just a while before it's preparing are mixed with some gum and is used for curing eye diseases, especially eyelid's pimples and running eyes, cratit (extra growing of flesh in eyes) and inflammation of eyelids.

Chewing leaves of Raspberry: is useful against inflammation of toothgums and their senseless, removes the mouth pimples and neutralizes fetid smell of mouth.

Raspberry's fresh juice: drinking fresh juice: prepared by Raspberry's leaves and stem with some Arabic-gum is useful for strengthening the stomach and stomach bleeding, obstruction of diarrhoea and for curing haemorrhoids. When a woman

drinks a decoction prepared by leaf and fruit of Raspberry right before the start of her menstruation she would not get pregnant during that month.

Raspberry's flower: obstructs diarrhoea and poultice of it's petals over bloody haemorrhoid (piles) zone is a very useful remedy for curing it's sores. Raspberry is the most constipating part of it's plant's organs, drinking decoction of it's root prevents diarrhoea and break kidney and urine-bladder's stones. Poultice of it's leaves mitigates the inflammations and opens boil (abscess) and pustule (pimple) and prevents leprosy, elephantiasis and gangrene sores from development.

Rubbing elixir of Raspberry's fruit: is useful against watery and infected sores and dries them and it's flower has also similar effects.

Raspberry's Poultice: poultice of Raspberry's leaves and it's narrow underground stem: is useful against pain in the upper thigh and foot bruises caused by sports or walking.

Raspberry's dye: cooked Raspberry leaves and plant and it's fruits makes a fine dye for turning the hair colour to a black one and repeating dyeing hairs with Raspberry die prevents the hairs to grow with the help of it's manganese content. Raspberry's fruit: is an antidote against animal poisons and especially against thorned eel (moray).

Dose of Raspberry's elixier and flower is upto 45-grams.

Growing zones: it grows in Northern parts of Iran as in Noor and Shirgah and Mian-Darreh in Amol, Ramian and Tonkabon, in Astara and Lahijan, in Arasbaran, in Tafresh, in Rud-sar and Ram-saras in provinces of Gilan and Mazenderan and in Northeast in Large province of Khorasan: around the city of Bojnoord and in provinces of Kurdistan and Baxityari.

Date. E.
Phoenix dactylifera. L.
Palmaceae. L.



Date palm: is a green palm and it's branches are cut from time to time from their base side of their large footstalks and the remains after the cuts around it's stem makes a scaly or scaled shape while it's stem grows up to 15-20 metres high.

Date palm's leaf: it's leaves rosette at it's top is made by fourthy large leaves, 12-new ones grow every year and likewise 12-leaves withers. According to a legend, the holy Jesus Christ was born under a adate palm and god commanded Maria to have of it's fruits.

Date palm: is bisexual on separate stands and gives fruit while it has it's head under the sun and it's feet in the water because the hot sun and water is necessary for this tree to grow.

Date palm's root: it's roots are long and influence themselves deeply because it needs resource of water while it's leaves should stay green as long as possible.

Date palm is cultivated in many countries today and main area for this large tree is Saudi-Arabia, Iran, Irak, Middle East and Southeast Asia, Northafrica, Half-continent of India, Pakistan and even Northamerica, is cultivated in many other countries with hot sun and source of water.



ManyvarietiesofDatehasbeenbroughtintoIranfromothercountries and therefore Date palm is planted in all corners of Iran and especially in Southwest around the Persian-Gulf.

Date fruits: are different in shape and size and taste. Date has a female tree and a male tree and the male tree does not give any fruit but it's pollen is essential for the female while the female tree needs the pollen of the male tree and after receiving it by farmers experts it will produce Date fruits.

Date's flower: grow at the tops of a branchy yellow raceme grown inside a large sheat with a fusiform from one corner of it and are captivated by it's petals as hulstors and open themselves sometimes after February and March. When it's sheat opens it is pollinated artificially by specialists through cutting the male pollen branch from the male sheat and place it in the female sheat.

Date pollen's marmalade: some folks produce marmalade by Date flower pollens. Date fruits are ready for picking sometimes after July until September when they are fully riped and then are picked by climbing to it's fruits and cutting it's fruit-stalks.



There are seven phases for Date palm fruits until they are riped.

The first phase is when the Male-date flowers are matured. Cortex (bark) of male flower's peduncles turns to red when they are old and loose also it's materials.

A potion of fresh male flowers strengthens the body and soul, the heart, brains and liver, it also purifies the liver. Having mashed of it prevents diarrhoea. Rubbing them over the teeth strengthen the teeth gums and prevent scaries (decay), infection and bleeding.

Dose of it is 10-grams and is used in form of infusion or powder. Infusion of a half kilo mashed flower skins in one litre of water until half of it is steamed away and then sugar has been added to it as much as for preparing the pulp and then it is steared until it is turned in to a pulp-shaped medicine with stomach strengthening effect, it is useful against food intoxication (poisoning, being infected) and chronical cold. Skin of male flowers are also used for producing a kind of date vodka (snaps, schnapps, aquavit) but in the way that Rose-water is produced, it has a delicate smell and is stomach strengthener, cures diarrhoea and stomachache. A kind of oil is also extracted from it after it's flowers are matured by half-mashing them and macerating them in equal amount of Olive oil and stearing few times a day during 3-4 days.

Mentioned oil is a useful medicine for stomach sore and for curing headache, rubbing it over the skull strengthens the hairs and prevents hairfall.

The second phase: is when the Date flower's piths are matured. When it's flowers are opened white thread-shaped strings and small ball-shaped pollen cases similar to white flour can be observed, the strings are famous as brain (pith) and has strengthening effect on stomach and soothe the blood's tension and reduces blood pressure. Consuming a dose of 3,5-grams Date flower's brains quenches thirst and prevents bleeding and especially bleeding in respiratory organs.

Date flower's white perianths (covering): increases sexual lust in both sexes and a kind of water is prepared by them in similar way that Rose-water is produced, it is then used as a drink for the strengthening of physical instincts.

Warning:

it is digested slowly but having too much of it can cause colitis and kidney stone (nephrolith; kidney calculus).

The third phase: is when the Date fruits are green and not riped yet. Green unripped date fruit contains: C-and E-vitamins and great deals of tannin, it is useful for the liver and prevents bleeding of teeth gums and stomach, it cures vomition, diarrhoea and bleeding of the womb (uterus).

Green date's poultice: it's poultice heals sore and gives delicate odour to a patient's body and prevents extensive perspiration (sweating). Chewing Green date:



strengthens the tooth gums and drinking it's infusion has been recommended for treatment of leprosy, it is not useful for throat and breast and may cause phlegma, boiling them with grapes until the whole is thickened and then use it as Oxymel in eyes is useful in curing trachoma, it prevents also running eyes and cures red inflamed eyelids.

The fourth phase: starts when the Date fruits are grown to it's riped size but are still green. Large Green date fruits: strengthens the stomach and increase the body teperature, cures diarrhoea, stomach bleeding and has been recommended for treatment of piles. Chewing Large green fruits: strengthens the teeth gums and prevents them from infection, it is hard of digestion and can create gasses in digestive organs and phlegm in stomach and are hard for digestive organs. Large green date fruit's wine: wine prepared by them has a sweet odour and has strengthening effect on stomach and bowels, it prevent loose bowels and may cause constipation in stomach.



The fifth phase: begins when the Date fruits start turning from green to yellow colour and in some specimens to brown red and are edible Date fruits, are dry and Riped dates that has not been mild and sweet. Yellow riped date fruits: break the thirst and prevents a diarrhoea and are hard of digestion and do not contain high value of nourishments but contain all materials (agents) as a Riped date contains. Yellow or Red brown riped dates: are popular and are sold in the markets and while after cutting are kept some where part of them turn gradually to dark brown colour and to a mild riped part but the other part remains hard and yellow and the other type to red brown. During the sixth phase Date fruits turn gradually and completely from yellow to dark colour and are the Riped date fruits. The Seventh phase: is when the Riped date can be boiled and dried and consumed, especially when one is going on hunting or going for a long way tour or for staying a long time away.



Riped dates contain: great deals of nourishments and produce blood in body, it is useful by weakness and tremors, it contains great deals of A-, B- and E- vitamins and a little deal of C- vitamin, it contains also Hazelnut's materials, albumin and some other medicinal substances and among them is one cortison.

Cortison: is a valuable substance and is a cure against spasms and infections and is used for preventing hairfall.

Riped Dates are not useful for diabetics but a cortison saved in Date fruit is a vegetarian hormone and is harmless to them.

Date's fruit: contains magnesium and has the quality of preventing cancer, it helps narrow persons to increase their weight and calms backache, it strengthens the sight, hearing, is cure for joint pain and ischias and is useful for respiratory organs.

Date fruit's boiled in milk: is lenitive for breast and increases sexual appetite, especially when they are macerated in milk a while before consuming, having Dates



with Yoghurt and chewing Dragon with it reduces it's negative effect.

Date fruit contains: minerals as phosphorus and calcium, iron and iodine and magnesium, persons who use Date fruits would keep a health away from being infected by cancer. Date and intercourse: men having of Dates before intercourse produce oftener boys than girls.

Date's boiled form: are useful for curing cold and throatache and infection diseases in respiratory organs.

Date fruit's stone: Stones of dates are boiled and it's juice is consumed for being useful against kidney and urine-bladder's stone.

Date stone's flour: flour produced by Date's stones heals chronic diarrhoea and prevents loose loose bowels, it is used for drying wet infected sores by powdering.

Date stone's flour in boiled form: can be used for rinsing the infected sores, it is also used for washing the eyes for preventing running tears and eye pressure.



Leek,
Garden-leek. E.,
Allium porrum. L.
Liliaceae. L.



Leek: is a plant with small bulb and is mostly seen in vegetable markets and used in food. Leek's leaf: it has narrow and empty cylindrical leaves as Onion leaves and are flat, every leaf is constituted of two tape-shaped green long leaves that are adjoined in angular form and have sheath at their base. Leek is a cultivated plant and has not been observed in wild form but some believe today that some of its varieties as *Allium ampeloprasum*. L. (*Allium vineale*. L.) that has a bulb divided to some parts and has narrow leaves may have been its original plant.

One of the Leek plant's characteristics is its rather thick stem base inside its bulb and its pink or white flowers are convened in shape of a large and round umbel. Leek's useful parts: are its leaves and small bulb that are consumed in form of raw or cooked.

Chemical substances: Leek has an essence constituted by sulphur compounds and its leaves contain different enzymes such as maltase, invertase (invertase), emulsion and a kind of carbon hydrate resulted from arabinose and galactose can be found in its contents.

Medical qualities: Leek has been used by people of Egypt, Greece and Rome as vegetable since the ancient times and because of being easy of digestion than any other vegetable and its taste and smell is milder than Garlic has turned to a popular item in the home kitchens.

Consuming Leek: has been recommended as useful for patients suffering from indigestion and overweightness, pain of joints or gout, arteriosclerosis and permanent constipation, is a proper food for patients disturbed by stomach and intestine irritation, it is a diuretic and very useful vegetable and has an absolute effect as an expectorant and lenitive. Leek's soup: cures dysuria and hydropsie (dropsy) and kidney stones. Leek seed's decoction: a decoction of 4-grams Leek seeds or infusion of 4-grams of Leek seeds in 1-litre of wine removes kidney stone and prepares the condition to urinate easier, the prepared remedy is used in cases of hoarseness, grippe, coughing, inflammation of throat and larynx and generally all inflammatory disposition of respiratory organs, whooping cough, etc.

Leek's soup and Leek's sherbet (mixture and prepared by its seeds in Wine as mentioned above): gives remarkable effect and results.

External use: rubbing Leek's leaves over a Bee sting calms its pain.

Leek's boiled leaves in milk: is used in form of poultice over infective ulcers, over rheumatological inflammatory or gouty or lumbago (ischias) zones for sedation and healing.

Cooked Leek leaves: under ashes of coal's fire used as poultice creates the opening of abscess, tumours and panaris. For this matter, Leek's pressed juice can be entered in Wheat's flour and made into a dough or massaged in a clump of mild bread and then it can be used for applying it over tumours or abscess for opening.

Leek's decoction: a decoction of Leek is used as enema and is accounted to be the best lenitive remedy and is very useful for curing surfeited large intestine.

Leek is cultivated in many corners of Iran and is usually used as spice in food.

Some of Leek's useful varieties that are cultivated in Iran are as followings: 1) *Allium victorale*. L.: grows in most of the Northern Hemisphere and its bulb has anti-worm, diuretic and heart strengthening effects. 2) *Allium tenuifolius*. Cav.: is an annual plant with long leaves that grow between 15-30-centimetres and are 2-3-centimetres wide, several stems are arisen from its roots and are lead to white convened flowers in form of spike, its fruit is small, and is a round capsule fruit, is 4-5-millimetres thick in diametres and contains black seeds, it grows in Canary- Islands in Spain, in India and Western Iran and its seed is diuretic and used externally in form of poultice over sores and injuries for healing and have also anti-inflammatory effect. 3) *Allium tuberosum*. Roxb.: has an inflated and cylindrical-shaped rhizome covered by small white roots, its flowers are convened at their flowering branch tops in form of a half globe, its fruit is odorous and grows in Himalaya areas in India, in China, Thailand and Bengal in form of a wild plant and is cultivated as well, its seeds are used as medicine for effusion of semen (ejaculation of sperm) and is cultivated in Iran.

Traditional use: a type of Leek is cultivated in Iran's Kurdistan but its Wild type has narrower leaves and stronger taste. There are two similar specimens that are mostly consumed, one is famous as *Allium latifolium*. J. Sp.: (Broad-leaved-garlic) and the other is *Allium porrum*. L. (Leek, Garden-Leek) that is different from other Onion specimens through its long and wide leaves and the skin covering its tops, it has also milder smell and taste than other Onions and therefore is taken more as vegetable than spice, it smells lesser than Onion and Garlic and when it is cut it would not make the tears run.

Leek's soup: a type of soup by Leek is commonly cooked that is prepared by Rice and yoghurt. For preparing the Rice is boiled in water about 5-centimetres over the Rice's surface and then a little bit of salt is added and then until the rice is mild, small pieces of a whole Leek are entered in the boiling water and Rice and when the water has been boiled in about 10-minutes, steam it a couple of times, when the water is reduced around 2-centimetres above the rice surface then a whole litre of natural yoghurt is added while it is boiling but with a low temperature in about 120-



minutes.

One should see that the whole should not become hard and drop in more water and youghurt until it is prepared and some strengthening vegetables as Parsley and clover and else are added in small deals. The prepared soup increases the urine and is expectorant and lenitive for the throat and has been especially recommended for driving the yellow particles and sediments out of the rhumatical patient's urine.

Leek's decoction: a decoction of it open the singing voice and heals colds, coughings and laryngitis, bronchitis and cures generally inflammation in respiratory organs. Leek's poultice: a poultice is made by Mashed leek for applying over Bee sting as calmative.

Leek contains: great deals of C-vitamins and mineraler as calcium and iron, it contains also magnesium and therefore has the quality of preventing cancer.

Leek and Vinegar: rubbing Leek together with Vinegar over the forehead and front part of the head prevents nose bleeding. Leek is useful against piles and neutralizes stomach gasses, it stimulates the appetite and increases sexuell lust, creates a clear facial complexion and consuming it turns the body skin to a clear one, consuming Leek purifies all repiratory ways and opens the bile-bladder, it turns the food to be easy of digestion and strengthens the back and heals hepatic liver colic. Leek's leaves: are diuretic and menstruative, consuming it's leaves after having food prevents the sourness in stomach and raises sexual lust, having 15-grams of Leek's leaves prevents the blood from the sore of piles. Leek mixed with Honey: Leek with Honey cures colds and inflammation of the respiratory organs and adding it in boiling Barley has been recommended against asthma.

Leek in pickles: consuming Leek in form of pickles is useful for the liver and the spleen and cures colic disease.

Leek's dry leaf powder: is a fine laxative (purgative) and using mashed fresh leaves with sufficient disinfecting remedy as a suppository in vagina is disinfectant and prevents an abortive disposition, boiling it's leaves with Vinegar and salt can help woman suffering from inflammation of womb by taking it in form of a sitting bath.

Leek with Honey: is antitoxin (antidote) and cures especially intoxication by food poisons, Leek is also useful against skin diseases, a poultice of Leek's leaves mixed with Sumach is useful against eczema and cures infected sores when it is used together with salt, Leek contains a type of penicillin. All specimens of Leek are digested slower and are more swelling than an Onion. Leek's juice in water has been used in form of a custom until today for entering sword and knives in it for keeping the sharpness of the blades during a longer period of time.

Warning:

Having overdose of Leek may darken the sight and destroy teeth gums and cause nightmares.

Leek's seeds: a dose of 8-grams of Leek seeds with 8-grams of Myrtle-berries are cure for colds and prevents bleeding, opens the liver and is appetizing, strengthens the back of the body and kidneys, urinary bladder and with wine strengthens sexual lusts.

Leek's smoked seeds: are consumed for curing chronic diarrhoea and stomach difficulties such as loose bowels and for neutralizing stomach gasses (carminative).

Smoke bath with Leek: is useful for curing piles.

Leek seeds: are recommended for being mashed and used in a poultice for applying over an insect's sting or a serpent snake's sting and for using also in skin eruption (rash) after a skin sore.

Leek's mashed seeds: in vinegar can neutralize its sourness.

Warning:

Leek seeds should not be used too often though it may damage the lungs, the kidneys and the urine-bladder.



Green paprika,
Guinea pepper,
Red pepper. E.
Capsicum annuum. L.,
Capsicum longum. DC.,
Capsicum sylvestris. Vell.
Piperaceae/Solanaceae. L.



Green paprika: is a plant with a stem that lacks down and grows between 30-60-centimetres high and comes originally from America's Torrid-Zones but it is cultivated today in most of the warm and

Moderate (Temperated-)-Zones.

Green paprika's leaf: Paprika's leaves are single and elliptical with top-sharp on it's lower parts of it's stem and lack downs at it's lower stem parts.

Paprika's flower: it's flowers are white or yellow.

Paprikas fruit: is fleshy and in different sizes, different colours as green or red or purpur and contain many white and plane corns.

Fresh paprika: is normally without smell and a hot taste but when it is riped it turns to a hot one with undesireable taste and therefore they must always be collected before they are riped. Paprika's flower: produce valuable nectar for the Honeybees.



Paprika has some important varieties as: Irish conoides. var., and Sendt longum. var., and many varietis that have been hybridised. *Capsicum frutescens*. Willd.: is another speciment of Paprika and has a rather wooden stem and smaller fruits. There are 30-speciments of Paprika in America and when it's fruit is ready before it is riped it would contains Carrot acid that is changes in a body to A-vitamin, it contains then A-, B-, B2-, plenty of C-and P-vitamins that preserves the youth (the consumed ones should not be riped and hot.).

Paprika's fruit: contains a dye material and proteins and sugar substances. Paprika's small corns inside it's fruit contain proteins, oil substances and in smaller and stronger speciments may contain also sour substances similar to citric acid and malic acid. Paprika like Black pepper helps digestion of food and is carminative (anti-flatulence).

Paprika is useful for elderly persons and persons with cold blood because it turns the fodd to a milder one and makes milder excrements (feces).

Elderly persons can raise their facial complexion by having of it and warm their stomach and cure their sour bleching.

For the younger persons it is recommended to have of it with food that would be hard



of digestion for helping the digestive organ to melt the food easier.

Hot specimens of Paprika irritate the skin and increase the saliva of mouth and pain of piles (haemorrhoid). Persons disturbed by stomach ulcer and smarting and persons having warm liver should stay away from hot specimens.

Paprika's corns: it's small corns inside it's fruit develop sneezes (sternutatory) and are used in treatment by snuffing as in cases of neural diseases and rheumatological treatments.

Paprika's fruit: is consumed in food as spice and as raw in salads and Dulma (rice and meat located in it), in pickles and especially in form of powder.

Green paprika: in form of Raw or Cooked is an appetizer and is consumed as medicine as well.

Green paprika's tincture or decoction: is consumed as diuretic and stimulative and stomach strengthener, but overdosing it may lead to vomiting, inflammation and spasms in stomach.

Using a little amount of it mixed with other bitter strengtheners is useful against weak digestion and feeling sour of the food in stomach, feeling sensations in stomach, is useful in successive vomitions, in diarrhoea, piles, in hydropsie, headache in one side of the head (migraine), rheumatism, whooping cough (Tussis convulsiva), successive coughings, loosing of voice, angina, pneumonia (lung inflammation), sea sick feelings and obstructing a womb's bleedings.

Using the drop of it's tincture in insufficient bitter strengthener has been recommended for persons being addicted to alcohol because it's effect over the mucous of stomach is similar to alcohol.

External use: it turns the skin complexion to a red one and it gives positive results when a cloth is entered in it's alcoholature and rapped over a painful zone caused by rheumatism or gout and neural pains, backache and partial paralysis (Paresis, Hemiplegia, Paraplegia).

Some medicines are extracted from Paprika's fruit corns for external use as gargling and bath and for rubbing over the face and skull skin for preventing hair fall.

Green paprika's powder: creates intensive sneezing. Dose of Paprika's dried powder is from 0,30-1-gram in form of tablets or mixed in Honey and in matter of piles it's dose can be increased to 3-grams, the dose of it's elixir is between 0,30-0,60-grams, in form of tablets 0,10-gram and it's alcoholic tincture is used in 10-30-drops, in case of gargle it's dose is 15-20-grams of it's alcoholature in 20-grams of water and the poultice for making the skin red is made by 20-grams of the Paprika fruit's powder with 3-grams of saindoux (wild svine's fat) and 15-grams Pea's powder.

For curing the lack of voice, 3-10-grams Green paprika's tincture (Capsicum) is used with 150-grams of Quinine (sulphate of quinine) and is consumed in form of gargle. There are 3-other varieties and two varieties grow in Iran, one is called *Withania somnifera* (L.) Dun., or *Physalis somnifera*. L.: is a perennial herb and is



covered with cotton downs, grows in vast areas of North Africa, Mediterranean and some South-Asian areas, its characteristic is its alternated and complete leaves, elliptical and small white flowers and its brown fruit with 1-centimetre in diameters and an effective material is extracted from its leaves with the name of Withaferine-A, its medicinal effect is used in curing fungus and cancer tumours, it is used in traditional medicine as soporific (somniferous), its seed has diuretic effect and its fruit yeasts the milk therefore it is used in some areas as in Africa's Sudan for its mentioned qualities.



Growing zones: it grows in Iran's province of Fars and around the city of Kazerun (north-west, 23-km) on the heights of 800-metres around the city of Jahrom, Daleki near Bushir, Kharg-Island, Baghemani near Bushir, Tange-Jaz near Konar-Takhte, in the province of Kerman in city of Bam (900-metres), Lar, Minab, the province of Baluchistan around the cities of Shahestan, in Mokran around the cities of Iran-shahr, the province of Sistan (24-km).



The second variety is famous as *Withania cogulans*, Pauq.: is a plant shaped as small bush with long and top-sharp leaves, a kind of grey or white yellow strings cover its branches, it has male and female flower organs over 2-stands or as polygamous are gathered around the stem's axil, its fruit is fleshy and is a berry fruit captured in its flower-cup.



Growing zones: it grows in Iran and India and Afghanistan, its root contains withferine-A, its seed is menstruative and diuretic, its fruit and leaves yeasts the milk, it grows in the province of Baluchistan (Southeast) around the areas of Karevan-dar, between Khash and Iran-shahr (1500-1600-metres), around Saravan, Kuhe-Bam-Posht (mountains) in 1000-metres distance. it is famous as Panir-band and Avishk in Baluchistan.



The third variety is named as *Withania frutescens*. Dun.: is a small plant and is dioicous (biennial), it grows in North of Africa especially in Southern areas of Marakesh, its fruit is used for yeasting the milk.

Traditional uses: riped fruit of Green paprika is red and therefore it is called for Red paprika by folks and the Red dye in its content is similar to carotenic acid and changes to A-vitamin in the body, it contains also B-and B2-vitamins and great deals of C-vitamins in a way that some drug industries extract C-vitamin from its fruit flesh, it contains also P-vitamin that preserves the youth by consuming small deal of it. Fleshy part of its fruit contains a dye material and a factorial substance, some albumins and some sugar materials, its seeds contain albumin and oil materials in their contents.



Some Paprika specimens are lesser hot and sour but similar substances to citric acid and sour acid of gall-apple can be found in their content.

Black pepper and other kinds of Pepper helps food digestion and are carminative (antiflatulent), elderly persons with cold teperament (diathesis, being phlegmatic

or have a sanguine melancholic temperament) should oftenly use it's flesh in food for making the food lighter and delicate and for preventing heavy and hard offals (residues).

Elderly persons create a red fragrance by consuming it's flesh and in this way warm their stomach and neutralizes their sour bletching.

Paprika: is a useful food for younger persons as well as for the elderly when a heavy meal hard of disgestion has been consumed, for making the digestion easier and let it's acid stimulate their skin, it increases mouth's saliva and soothes the inflammation of haemorrhoids (piles).

Warning:

Personswithstomachsoreandpersonsfeelingburning(smarting,irritation,sensation) while urinating and also persons with inflammated liver should avoid consuming Green paprika.

Small corns of it's fruit after drying develop sneeze and are used for preparing snuff, curing neurotical diseases and medicines for curing rheumatism.

Green paprika: is used in cooking for preparation of Dulma and is used for being used in pickles and dry powder of it's Dry fruit corns is mixtured in different types of souces and flavours.

Black pepper plant. E.
Piper nigrum. L.,
Piper aromaticum. Lam.,
Piper colinum. Persl.
Piperaceae. L.



Black pepper: is a climbing plant that is also called for Pepperidge plant with half lignificated shape of stem and branches that grow over their roots while it's roots fasten themselves to trees around itself and for surviving coexists as a parasite on them, when the roots the next tree are cut Black pepper plant will also dry and die. Black pepper plant: has two types of branches, one is giving birth to it's flowers and the other generates sub-branches both types of it's branches grow by it's stem leaves.

Black pepper plant's leaf: it's leaves are single and elliptical with sharp tops. Black pepper's flower: it's flowers are convened and are gathered in an ax of 20-30-flowers around it's flower's axil and is called for Shatoon in Persian language.

Black pepper's fruit: after flowering it's small round fruits grow and normally hang out and after being riped are separates from it's branches.

Original home for Black pepper plant is India and has been spread throughout the world via there.

Black pepper plant: is not similar to Red or Green pepper and belongs to another family of plants.

Useful parts: Black pepper's fruit is sold in the markets both in form of Black pepper (poivre noir) and White pepper (poivre blanc).

When Black pepper's fruit is dry before becoming fully riped they are picked from it's plant, then are spread under the sun's heat or in especial mashines with low heat for drying, when they are dried their skin turns to dark shrinked and dried, it's fruit is 4-5-millimetres in diametres thick and has a round shape.

White pepper: is the fully riped fruits that have been macerated in water without to loose it's flesh saving, they are then placed in baskets and the baskets are placed in a water stream to rest in 4-days, then they are pressured until their flesh is separated, the rests are dried, mashed to powder and later on sold as the White pepper, it has a white grey colour with lesser smell than Black pepper but is hotter than Black pepper, White pepper loses it's smell because of loosing it's outer flesh that contains essence but has already been separated, it contains 1,5-percents essence with odour and has a burning taste, besides the mentioned ones it contains a type of raisin dissolved in ether and alcohol with strong burning taste and an alkaloid famous as piperin, the set of mentioned raisin in White pepper is higher than in Black pepper. Black pepper has stimulating effect and develops sneezing and despite the fact that it stimulates

the digestive organs and the glands it has never been used in medicinal treatments, it is commonly used as food spice.

Warning:

an overdose of Black pepper can cause stomach and pancreas (sweetbread) secretions and diseases. Black pepper's powder: makes the flies escape away. Unfortunately in many countries Black pepper is mixed with some other plants in terms of economic cheating, they are mixed with the following herb's powder: African myrsine (*Myrsine africana*. L.; Myrsinaceae), Mezereon (*Daphne mezereum*. L., *Thymelaea mezereum*. Scop., *Daphne praecox*. Gillib.; Thymelaeaceae); Buckthorn (Common buckthorn, Purging buckthorn (*Rhamnus cathartica*. L.; Rhamnaceae), Juniper (Common juniper, Ground-juniper; *Juniperus communis*. L.; Cupressaceae), Embelia (*Embelia ribes*. Burm.; Myrsinaceae). There would be a need of laboratory research for finding out about this kind of mixing and for testifying whether or not the Black pepper in question is real and has not been mixed.

Other types of Pepper: one is the Common pepper famous as the Lady's thumb or the Common persicary, the Red pepper is called for Red pepper or Lady finger, the Red pepper in form of powder is called for Cayenne pepper, the Sweet pepper used in pickles is called for Allspice or Pimento, another specimen is Water pepper or Sea pepper that is called for Smartweed or Water-pepper, the Wild mountain pepper from India and is famous as *Fagra rhetsa* in India.

The most important Pepper lands are in Asia and Africa, South America, Indonesia and Malaysia.

Pepper plant is perennial and its leaves are thick and oval and dark green. When it is cultivated in a Coffee field it turns around its tree and the duration of its flowering time and harvesting is 6-months and Black pepper is harvested once or twice a year.

Black pepper maintains the taste of other spices and is especially useful when it is added with Thyme (*Thymus vulgaris*. L.), Salvia (*Salvia officinalis*. L.), Rosemary (*Rosmarinus officinalis*. L.) and Garlic (*Allium sativum*. L.).



Turnip,
Nape, Naphew,
Winter rape. E.
Brassica napus. L.,
Brassica rapa. L.,
Brassica napobrassica. L.
Cruciferae. L.



Turnip: is a plant in form of a vegetable and different specimens of Turnip have different sizes but it grows mediumly between 30-50-centimetres high. Turnip's flower: it's flowers are smaller than Cabbage flowers (*Wild cabbage; Brassica oleracea*. L., DC.). Turnip's leaf: it's leaf is long and is spear-shaped at it's top but the rest of it's leaves have winged footstalks up to it's adjointment to it/s stem and looks wavy on it's edges with a thick and juicy middle part and lacks downs.



Turnip's root: it's root is distanted from it's stem and it's different varieties have blown narrow or long roots with distinguishable forms. Most important specimens of Turnip is *Brassica oleifera*. Dard. (DC.) with a rather inflammated or narrow root, it is famous as Colza and a kind of oil is extracted from it's seeds famous as Colza oil (*Huile de colza*).



Another specimen of Turnip is *var. esculentha*. DC., with inflammated root and is used in culinary art.

Medical qualities: seed of Turnip (*Brassica napus*. L.) is used for extraction of oil and contains 30-40-percents oil similar to oil extracted from seeds of *Brassica oleracea*. L. (DC.), it has lenitive and mitigative effects and therefore is used in curing liver and kidney catarrhs (kidneyrheums) by using a dose of 1-soup-spoon upto ones small glass.

External use: Oil of colza has since the ancient times been used for healing sores over body skin.



Root of Turnip has diuretic effect and dissolves urate sediments, is antiscorbutic, is lenitive and is effective in removing kidney stone and curing gout and urine-bladder's inflammation and and in curing overweightness (fatness).

Turnip's underground root is used in form of thickened decoction that contains 10-percents of water and is used with Honey but in case of children a sherbet form of it is used.

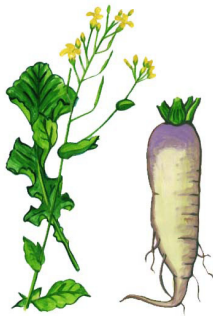


For preparing such a sherbet: it's thickened root is chosen and a hole as mentioned in Cultivated radish (*Raphnus sativus*. L.) as big as cup's bulk is created in it's thicker part and a small hole is made in it's base under it in a way that by dropping water in it's bigger hole water gradually and slowly drops from the hole made in it's base then some cube-sugar are grounded and placed in the larger hole and then the whole

is placed over a container and after a few hours it should drop into the container while containing useful substances of the Turnip's root mixed with sugar and in this way a sherbet is prepared that can be given to children in dose of 1-soup-spoon every time of using and can be repeated few times a day as expectorant. Decoction of Turnip root in 10-parts in water or sherbet is also used against mentioned diseases.

Another way of using Turnip plant is by grinding its root and mixing Honey in it or using Cube-sugar in equal weight in a container and then boil the whole into a sherbet (Thickened, inspissated) fluid.

Consuming small doses of Raw turnip root in some following days is useful for curing eczema.



External use: Turnip's thickened decoction in form of a poultice is used for calming pain of joints and gout, abscess and cold, etc. Turnip's root baked in oven: its pieces after being cold are affected over body skin in a way that its juice is smeared over body skin, it is an effective remedy in curing chilblain (frost-bite, nip). Turnip is cultivated in most parts of the world.

Another variety of Turnip is *Brassica rapa*. (L.) Metz.: has two specimens, one specimen has a small and narrow root and its seeds are used for extraction of oil and the other specimen has a thick inflated root and is used as food and mostly in soups.

Brassica rapa: grows in different parts of the world in several countries and traditional physicians believe that its soup form can cure over 70-types of diseases.

Traditional use: cultivated form of Turnip has a blown white root and its upper part near the surface of the soil is purple coloured and has a conic form with almost cylindrical shape, it contains 8-percents starch materials and 2-percents fat substances and 2-percents albumin substances and contains also some deals of cellulose and therefore having of it gives a feeling of being fed and gives sufficient energy but does not increase the weight, it is not harmful to diabetics and on the contrary because it contains useful substances for diabetics it helps curing it, its white substances (albumin) are useful for nerves and brains, for increasing memory and for giving strength to the nerves. Turnip's root contains: A, B, P- and C- vitamins, minerals as phosphorous and calcium, sulphide and magnesium, iodine and a little deal of arsenic, rubidom and is the only edible vegetable that contains both useful substances of arsenic and rubidom that increases its curing effects many times over other vegetables and can cure most difficult diseases and as the Iranian and some Asian countries folks believe it cures over 70-diseases.

Turnip root's soup: cures leprosy that is accounted as one of the most difficult diseases to cure, because leprosy takes place when a person's body lacks sufficient deal of arsenic and sulphide substances in food form and can only affect a person when



arsenic and sulphide are not present in a person's body, it contains also antimicrobe and antivirus solutions with vast range that can terminate microbes, viruses and therefore cures rheum and especially dry coughs, it mitigates the breast, stomach and has been recommended for curing angina, asthma and whooping coughs.

Food prepared with Turnip's root: preserves the food safe from air microbes for a period of time and is especially made in form of soup in Iran, Thailand, Laos, India, Pakistan, Afghanistan and other Asian countries with few leaves of Basilic and some drops of Citron before every meal.

Turnip's soup: having of Turnip's soup keeps a person safe from skin diseases and increases power of sight, prevents night blindness and increases sexual diseases, it is useful when erupted skin and split sores are rinsed by it in case of gout and itching, it strengthens the resistance of the body against all diseases and calms arthritis and nerves, it reduces blood pressure and prevents anemia, has fundamental role in strengthening ovaries and genitals, prevents the womb to develop a healthy and strong fetus and prepares a woman for getting pregnant, increases the urine volume and this effect is much higher in its narrow and new grown stems and because of its sulphide content breaks kidney and urine-bladder's stone. Poultice prepared by it opens tumours and mitigates inflammations and cures infants infected by aphtha by giving them some drops of its decoction.

Folks believe that consuming it during a whole winter preserves a person's health during the rest of that year.



Garden cress,
Nose-smari. E.
Lepidium sativum. L.
Ranunculaceae. L.



Garden cress: is an annual plant and grows between 20-30-centimetres high and it's original home stretches over a vast area from Egypt to Tibet. Garden cress is a well known vegetable and is cultivated in most countries in the world. Cultivation of Garden cress: is done by seeding and it's transmission is done by it's seeds to elsewhere and within a short time influences into a farther land.

Garden cress's leaf: it's leaves and also it's stems are light green and are edible and used in form of raw in Sanwitches or cooked in stews and soups.

Garden cress's flower: it's flowers are white or bright pink, it's flowers have mild odour and Honey bees are in found of it's nectar.

Garden cress's fruit: is elliptical round and 5-6-millimetres long, 3-4-millimetres wide and is weakly winged.

Garden cress's fresh leaf and stem: has a hot and delicate taste similar to Water cress (*Nasturtium officinale*. R. Br.).

Chemical substances: Garden cress contains an important glucoside named as tropéoloside that by analysis (breakdown) creates sénévol benzilic.

Medical qualities: Garden cress has a strong antiscorbutic effect and is used in Salads as appetizing vegetable in form of fresh and raw, it is a diuretic and blood purifier.

Garden cress's juice: or maceration of it in wine is used as a diuretic in hydropisie (dropsy), general rise of body (edeme) and has a rather definite effect. Garden cress's seeds: are used as stomach strengthener and expectorant and as menstruative.

A kind of oil is extracted from Garden cress in some countries as in Ethiopia. Garden cress has been recommended in modern researches for increasing the flow of blood circulation system in matter of arters of heart and for opening blood-vessels (Vasodillato) and can always be used in thoracic or pectoral angina (Angine de Poitrine).

A similar speciment famous as *Lepidium rudérale*. L.: grows in Northwestern Iran in province of Azerbaijan: in Hassan-Begloo area in Ghara-Dagh with antiscorbutic effect, effect of strengthening and is commonly used in some areas of Russia where it is used also for curing intermittent fever. Seed of *Lepidium rudérale*: is entered in

Miracles of Herbs

some of insecticiding fluids but it is not common to use it for medicinal treatments. Growing zones: as mentioned formerly seeds of Garden cress are spread by wind and else and therefore spread itself throughout a vast area, it is cultivated in Iranian home gardens and is always available to buy it in vegetable markets, it is also common to cultivate it in most Asian countries and in Africa as well as in European countries.



White mustard,
Mustard. E.
Sinapis alba. L.,
Brassica alba. Boiss.
Cruciferae/Brassicaceae. L.



White mustard: is an annual plant and grows between 20-60-centimetres and is covered by rough downs in farms, agricultural lands, along side the roads and shadowy areas, especially in calcareous or an argillaceous soil.

White mustard's leaves: its leaf's lamina is divided into distinguished parts and has yellow flowers with a rather delicate especial odour.

White Mustard's fruit: is a silique fruit and is 2,5-4-centimetres long and has a distant disposition from its stem, end part of its fruit

contains seeds with irregular callosities over their surfaces while its top parts lack seeds and occupies most of its fruit's length with a plane disposition and covered by hairs, top part of its plant lacks seeds and is shaped as the beak of its fruit and covers more than a half of its fruit and is one characteristic of its fruit. White mustard's seeds: are rather large and bright and are yellow red.

Useful parts: useful part of Mustard plant is its seeds, White mustard seed is 1,5-2-millimetres long and weight around 6-milligrams and has a yellow fruit kernel.

Maceration of White mustard's seeds in cold water creates great deals of mucilage secreted from its covering layer and its cuticle and when it is chewed a mild hot taste can be sensed.

Chemical substances: seed of White mustard contains between 25-35-percents of mucilage and 4-5-percents of myrosine that is considered as great deal of myrosine and 2-percents of a glucoside famous as sinalbine that under effect of myrosine and in vicinity of water is hydrolized and gives sénévol sinalbine and sinapine sulphates acid.

Sinalbine or sinapine glucosinabate ($C_{30}H_{42}N_2O_{15}S_2$): is a material that can be found in content of White mustard seed's essence.

Sinalbine: is crystallized in form of needle-shaped crystals in 95-degrees ethanol and melts in 100-102-degrees of heat, it is soluble in very warm alcohol and in cold water.

White mustard's oil: is extracted from its seeds and has a golden yellow colour with hot taste and smell, it is not used as food and is used in industries in some countries as India.

Medical qualities: White mustard has been used among the folks since the ancient



times and in different ways compared to our ways of using it. Dioscorid did not see differences between Mustards and recognized them as similar or as same plants. After him the scientists as Pline could distinguish three specimens among them. During the 1600-century considering medical effects of two specimens of White and Black mustards effects the White mustard was considered to be weaker than the Black mustard. In the beginning of 1700-century seeds of White mustard has been used for flavouring foodstuff.

Consuming mustard started since the beginning of 1900-century but not in a proper way of using it and has been used in different ways.

White mustard's seed: turns the skin complexion to red colour with weaker effect than Black mustard therefore White mustard has never been used for turning the skin complexion to red but is used mixed with Black mustard seeds.

White mustard seeds were used during a long time for curing chronic constipation but after experiencing it's side effects lost it's internal use and Linseed (Plantago psyllium) was used instead of White mustard's seeds.

Some physicians found out later on that the seeds of White mustard after maceration and bursting of their cuticles secreted great deals of mucilage that sometimes were fastened to each other and gradually created a bulk of mass that by itself prevented materials in intestines to pass through and also remained as adjoined seeds in form of a mass in intestines and caused gradually stimulations in intestines and created even poisonous substance of hydrogen sulphur and disturbances in body.

Dose of Mustard: seeds is 1-2-food-spoons in form of lenitive before breakfast or before a night asleep. The famous scientist Dr. Cazin used White mustard seeds as a diuretic and for curing edeme (general inflammation of body), in intermittent fevers, chronic rheums (catarrhs) especially urine-bladder's rheum (catarrh) without creating stimulations and has useful effect but it seems that he used the Black mustard seeds because no other scientist had recovered same results from White mustard seeds as he described.

Shelled white mustard seeds: are used for grounding and preparing a dust of Mustard that in England is used mixed with other flavours in foodstuff.

White mustard seed in form of shelled and mixed with other spices is made into a paste (dough) and used for flavouring foodstuff.

Traditional use: White mustards fruit has a cover that does not open when it is completely riped and seeds inside it are yellow and have plane form.

All of it's plant is covered by rough hairs. In the past times was one of the important medicinal drugs and was used as odorous plant and as antidote.

White mustard seeds that are important food and drug are gathered by machines are dried after gathering.

White mustard seeds contain oil up to 30-percents, 2-percents of sinalbine that in humid area and in presence of an enzyme famous as myrosine is analized and gives

sulphur sénévol.

White mustard's flour (powder): is used in poultice (compress) and in dressing of a wound with cloth for applying it over rheumatismal pains that can irritate the skin. White mustard's poultice: has stronger effect when it is 40-degrees warm but it may hurt the skin.

Complete seeds of White mustard: are used in medical industries for preserving some of the vegetables and its mashed seeds are milled for preparing of the common edible Mustard sauce.

Growing zones: White mustard grows in vast areas around the world as in Southern and Central European countries, in North Africa, in Asia up to China and is propagated spontaneously through its seed's transition constantly together with cereals, grains, is also cultivated in England and some other countries. White mustard plant grows in Iran's Southern provinces as in the province of Khuzistan: around the city of Masjid-I-Soleyman and around the Bushir city near the Persian-Gulf and in Kuhang between the cities of Dezful and Shushtar and in the ancient Susa's ruins.



Horseradish,
Scurvygrass. E.

Armoracia rusticana. Gaertn.,
Cochlearia armoracia. L.,
Armoracia lappatifolia. Gibb.
Cruciferae. L.



Horseradish: is a perennial plant that lacks downs and has a vertical white yellow divided fleshy root and stem that grows between 50-150-centimetres. Wild horseradish: grows in humid mountains alongside the waterstreams and in shadowy areas of Europe and some areas in Asia but does not grow in Iran and it's original home has been speculated to be Southwestern areas of Asia. Horseradish plant: has an upright straight stem and has two types of leaves. Horseradish leaf: it's lower leaves around it's base are large and their margins lack deep dentates, are up to 30-100-centimetres long with lanceolate-shaped or spear-shaped leaves and long leafstalks but it's upper leaves are small and are complete leaves, have lobes with deep indents and are almost pinnate-shaped with short leafstalks.

Horseradish's flower: it's flowers are white. Horseradish's fruit: is a siliqua fruit and is a very small elliptical fruit and is odorous.

Cultivation of Horseradish: is done in dry shadowy areas.

Useful parts: Horseradish root is the only useful part of it's plant and is grey over it's skin but it's inner flesh is white to white yellow. Horseradish's root: is long and is almost 100-centimetres long and it's middle part is 3-4-centimetres thick and is similar to a rope, it has a burning taste even after drying and it's smell is not normally sensed but after mincing, grating or being mashed smells as Mustard seed similar to tear gas.

Chemical substances: Horseradish's root contains sugar and fat materials, glucosides famous as synigrine and is also called for myrosine. Myrosine after being mashed in it's root and under effect of water creates isosulphosinate of allyl or creates sénévol allyl and glucose. Sénévol allylic is an essence extracted in a quantity of 5-percents of it's plant in form of pure and lacks dye but has strong smell with specific weight of 1,01. Different laboratorial investigations has shown that main root of Horseradish's

plant contains more deals of synigrine (myrosine) compared to plants in Cruciferae family. Synigrine (synigroside or potassium myronate: $C_{10}H_{16}KNO_9S_2$): is a glucoside and it's Beta form has been extracted from Horseradish's root and from seeds of White mustard (*Brassica nigra*. L.) and also from Garlic mustard (Jack in the bush, Sauce alone, English-treacle; *Alliaria officinalis*. Andz.).

All three mentioned plants belong to Cruciferae family (It's extended formula was found by: Ettinger and Lundean during 1956 and it's synthesized form was created by: Benn and Ettinger).

Monohydrate of synigrine contains: one molecule of water ($C_{10}H_{16}KNO_9S_2$, H_2O) in form of crystallized and melts in 127-129-degrees of heat. Monohydrate of synigrine is insoluble in great deals in water and very warm water but is soluble in benzene, ether and chloroform.

Tetra acetate of synigrine ($C_{18}H_{24}KNO_{13}S_2$): has been extracted in crystallized form and has a melting point between 193-195-degrees of heat.

Medical qualities: using Horseradish is not going back to very old times because during the first century-AD., the plant was used by Raifort was not the same plant used in our days, it seems that Horseradish comes originally from Salve country under the Russian term Chern and was brought to Europe later on and was named differently in European countries as in France was named Cran and Cranson but in England was named as Horseradish and Scurvygrass, in Italy took the name of Rafano salvatico and Armoracio and in Germany was named as Meerettig and Meerretich. Spreading of Horseradish was intensified during the 12th-century-AD., and St. Hildegarde recommended it's effects by using it as lenitive and for curing kidney diseases, for curing kidney intoxication, for removing intestinal worms, curing jaundice (paleness, chlorosis), involuntary urinating, pectoral (thoracic, breast) diseases, eczema, etc.

Consuming Horseradish as vegetable is common today in many European countries as in England and Germany, Italy, Sweden and France, etc.

Horseradish's root: has diuretic effect and is stimulative, antiscorbutic, is a strengthener and is expectorative (antihumor, antiplexus), it's root was infused in water or it's macerated in white wine or in turned milk was used for preparing diuretic solutions in different diseases such as in hydropisie (dropsy) and edeme (general body inflammation), inflammation of kidneys and albuminuri, kidney stones and chronic rheumatism, gout and inflammation of lungs, humid asthma and chlorose, weakness and some skin diseases and jaundice, etc.

Consuming root of Horseradish was recommended (by: Echstein and Flamm) in cases as lack of stomach mucous (snot) secretion and flatulent and curing coughs in tuberculosis patients under the circumstances that the patient would not be in an inflammatory disposition and nightly perspirations. Horseradish root: turns the body skin to red colour by affecting it over the skin and was used by traditional physicians



during a period of time.

Horseradish's Poultice: is prepared by its mashed root that creates the sense of heat in skin after 6-minutes by applying it over body zone and by repeating this after 20-minutes senses of burning and smarting will be created again.

External use: poultice of Horseradish root has been recommended by scientists in nerve pains such as slipped disc (satiq), cramps, rheumatism pains, it has also been used in breast spasms, vertigo, pectoral spasms (breast spasm), in paralysis, local paralysis and lumbago (ischias).

Horseradish's leaf: its leaves are still used in traditional medicine for curing burn injuries and skin cuts.

All kinds of Vinegar famous as Raifort vinegar is prepared by macerating parts of Horseradish plant in Vinegar used for removing Taches de Rousseur (skin freckles or spots).

Medicinal forms: infusion of 15-30-grams of its root in 1-litre of water. Fresh root juice in 1-litre of white wine or beer used in doses of 2-3-small cups (each cup should contain only 5-soup-spoons) per day. Sherbet (syrup, according to Dr. Leclercs formula) prepared by fresh parts of Horseradish root used as antiscorbutic, for preparing, fresh parts of its root are cut into thin slices and spread over a muslin (a kind of cloth) inside a large container and sufficient deal of sugar is added, within a short time a fluid with sweet taste is created that is a mixture of sugar and juice of Horseradish root's parts and is the prepared sherbet, then it is used in dose of 1-2-soup-spoons per day.

Another medicinal form: of Horseradish is famous as the Compound Raifort sherbet (Raifort composée) and is prepared by different parts of the Horseradish plant and its root and then is used mostly for curing children (infants) and is especially used in rachitism, scrofula, chlorose and mildness of tissues in doses of 10-15-grams per day and dose of it for adults is between 30-80-grams.

Tincture of Raifort compound sherbet (Raifort composée) or Antiscorbutic tincture: is used in dose of 10-30-grams for adults per day and between 5-15-grams for children in form of a mixture in a sherbet. **Antiscorbutic wine:** is used in dose of 30-125-grams for adults and 20-50-grams for children (infants).

Medical forms: of Horseradish in external use is common to be poultice prepared by grated root of Horseradish in form of cold and for turning the skin to red colour that in fact leads the blood to certain zone of the body skin (by: Dr. Leclerc).

Effect of Horseradish root is better and more definite than poultice prepared by Mustard.

Other useful specimens of Cochlearia are : Pringlea antiscorbutica. Hook.: is a plant that grows between 70-100-centimetres and its leaves grow just above the soils surface around it, its stem generating its flowers grow among its leaves that in some of its specimens grow upto 100-centimetres high and its fruit is a siliqua

fruit with the content of triangular-shaped seeds with irregular shapes, it grows in Kergulélen islands and it's young leaves are used raw in Salads, it's stem pith is also used and smells as Horseradish and is the plant that saved the sailours sailing from the Southern seas from scorbute and as it's name indicates is antiscorbutic and cures disturbances caused by lack of C-vitamin.

Pringlea antiscorbutica. Hook.: does not grow in Iran.

Traditional use: Horseradish root is used in fresh form and seldom in dry form that has lower effect.

Horseradish has been imported to England and are cultivated there but has also turned into a native plant that grows spontaneously in vast areas.

Cultivation of Horseradish: Horseradish is cultivated by planting it's suckers in distant of 50-centimetres from each other in a proper soil and are drawn up through the autumn season.

Horseradish's root: contains great deals of glucosides that after being mashed releases Mustard oil with a hot and burning taste, it contains also C-vitamin and an antibiotic substance.

Horseradish root affects the skin and after a period of time can create blisters.

Having little deal of Horseradish in food stimulates the digestive organs and is also used against coughs.

Great deals of Horseradish is not recommended though it creates inflammation in digestive organs.

Horseradish root is used for curing bronchitis or a form of tonic of it is used for this matter, it's marinated root is used as spice in food and a sherbet is prepared by it through cutting it's root into slices and boiling them with sugar, resulted sherbet is used in dose of 1-3-food-spoons per day.

Thin slices of it's root are used externally for curing rheumatism and for affecting boils and corns.

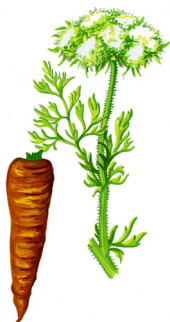
A speciment famous as Radish (*Raphanus sativus*. L.) has similar medicinal effects and is sometimes used for mitigation of bronchitis (inflammation of bronchitis).

Horseradish contains: especial oil essence (sénévol) and amino acids, antibiotic materials and also antiseptical substances that prevents propagation of microbes and when it is used together with a meal prepared by meat stimulates the function of intestines and limits the activities of the microbes in digestive organs and is effective against the virus diseases such as grippe (influenza or cold in the head (coryza, rheum, nasal catarrh).

Horseradish is diuretic and lenitive and is expectorative against humors.

Grated root of Horseradish together with Wheat flour and hog's fat (Saindoux) in deals of one part (one root) and other part by Wheat flour and Saindoux (fat of hog) makes a salve that reduces rheumatical pains but affecting it over the same zones may irritate the skin.

Carrot. E.
Daucus carota. L.
Umbelliferae. L.



Carrot: is a plant that because of its vast cultivation during the successive centuries has turned into a shape unlike to its original plant.

Some scientists recognize the Carrot plant to be a hybrid of *Daucus carota*. L., and the specimens of *Daucus maxima*. L., but some other relate it to a variety famous as *var. sativa* from *Daucus carota*. L., or from a specimen famous as *Daucus sativa*. Hoffm.

Some other scientists recognize the Carrot plant as a developed variety from *Daucus carota* that is the main variety of Carrot that means the Carrot in our days has emerged through pollination with races and different hybrids and through adaptation has turned to its present form of Carrot.

Cultivated carrot: has different forms and races and hybrids that are different in thickness, root, colour and the percentage of their containing substances. Both Wild and Cultivated carrot have medicinal effects with the difference that the root of Cultivated carrot is also edible and useful.

Carrot is a biannual plant with a straight root and an air stem that lack downs and its cultivated one is grown all around the world.

Carrot's leaf: its leaves are alternated leaves that lack stipule and are lead to a casing with a rather high growth and every leaf's lamina has narrow cuts on its both sides of its main nerve that makes a compound pinnate-shaped leaf and each leaflet is divided in to several thin and deep divisions.

Carrot's flower: are white and small and are convened in form of a compound umbel. One characteristic of Carrot plant is an involucre at the base of its main umbel compounded by thread-shaped divided bracts. Stands of its subumbels has also small bracteoles in form of involucre under the base of its umbel, Carrot flower's cup (sepals) are small and have a shape of every other disposition with its petals (corolla).

Carrot fruit (seed): is compounded by two mericarps adjoined to each other and is covered by rough hook-shaped hairs.

Useful parts: useful parts of Wild-and Cultivated Carrot varieties are their roots and fruits (seeds).

Chemical substances: every 100-grams of a Cultivated carrot root contains: 86-89-percents of water and its acidity is accounted to sulphuric acid by 0,46-percents and 1-1,78-percents nitrate materials, 0,02-percents of fat materials and 6-9,3-percents

of glucosides, 1,4-1,6-percents of cellulose and 0,9-1,03-percents of ash, one sterol and phosphate (licitine), 1-3-percents pectic materials and one dye substance that is crystallized from Carrot's pro A-vitamins and different diastases.

Recent investigations has shown existence of a herbal kind of insulin with reducing effect over bloods sugar in Carrot.

Carrot's root and fruit (seed) contains: a kind of essence that is extracted through distillation of fruit and root of Carrot plant under effect of steaming by water. Effective yield by this method is between 0,8-1,6-percents and include pinéne, limonene and daucol. Essence of Carrot's fruit (seed): has a bright yellow colour or yellow umber and savours of odour and is used for flavouring some kinds of foodstuff.

Daucol (C₁₅H₂₆O₂): is also extracted from Parsley's fruit essence (it's extended formula was determined by: Sykora and his research group). Daucol is extracted in form of pure crystallized form in petroleum ether in minus 30-degrees and melts in 113-115-degrees of heat. Another type of essence with strong smell similar to essence prepared by it's root and fruit is extracted from Carrot's inflorescence and is a little bit different in physical characters.

Carrot's seed (fruit) contains: a substance famous as carotol (C₁₅H₂₆O) that was extracted firstly in 1925 (by: Asahina and Tsukamoto).

Medical qualities: a) Wild carrot's has a root with diuretic effect and a 30-40-per milles decoction of it's root is consumed in doses of 3-cups a day before every meal for curing hydropsie (dropsy) of tissues, it's fruit (seed) has stronger but similar effect therefore 10-15-grams of it's seeds in form of infusion is used divided in 3-parts in 3-cups of water for consuming in one day (each part in 1-cup of water).

Wild carrot's seed: consuming Wild carrot's seeds has been recommended for curing different diseases such as anasarca (tissue dropsy), for curing renal catarrhs, hysteria and for strengthening stomach for curing flatulence (carminative), for counteracting indigestion and as an antidote against a snake's poison.

Wild carrot's seed: has widening effect over arters of the heart (vaso-dilato cardiac) therefore is ranked equally to useful drugs in thoracic angina (pectoral angina, Angine de Poitrine). b) Cultivated or Edible carrot: root of Cultivated carrot because of it's content of A, B, C- and D- vitamins and a little deal of E- vitamin is ranked among the most valuable food materials and useful for body.

Lack of mentioned vitamins in a person's body creates different types of diseases and disturbances, especially during the years of puberties. Because containing vitamins remain after keeping Carrot in conserve cans it can be found throughout a year. But by cooking Carrot root some of it's C- vitamin is reduced. Different experiences has shown that root of Carrot because of it's vitamin content has useful effect in increasing the resistance of the body organs against infectious sores.

The outer skin of Carrot should not be removed and can be rinsed under water and scraped mildly by a rough brush or a knife blade. Consuming Carrot root: is useful



for curing hydropsie (dropsy) and strangury (disability of urinating), irritation and inflammation of digestive canals and respiratory ways, for curing resistant coughs and asthma, sanguine humor and even for removing infants inner organ's worms. The quality of removing infant's worm has no relation to Carrot root's essence.

Carrot root's juice: Carrot root's juice in form of pure or mixtured with milk creates expectorative effect therefore it is useful in curing breast diseases and asthma and coarseness of voice.

Carrot soup: a kind of Carrot soup is prepared by boiling 1-kilo of minced Carrot roots in 2-hours is useful for curing constipation.

Carrot soup for infants: is prepared for infants with sensitive stomach by filtering or rinsing Carrot soup that has been prepared by boiling 200-grams of minced Carrot root in 1-litre of water and is mixtured later in milk in equal parts during the first 3-months but after 3-months gradually 2-parts of milk and 1-part of Carrot soup is chosen for mixturing.

Carrot seed's infusion: infusion of 1-Coffee-spoon of Carrot seeds is used for preparing 1-cup of hot boiling water with strengthening effect, it is appetizing and is diuretic, increases secretion of milk and is weakly menstruative.

External use: it is useful to place mashed root of Carrot over sores and ulcers as calmativ that is also used in different skin diseases. Carrot root's decoction: a decoction of Carrot root or poultice of it's fresh mashed leaves or resulted lotion from it's fresh leaves has useful effect for curing abscess, female breast cancer, new and chonical sores, ulcers of legs (varices ulcers), burn injuries, skin diseases such as eczema (tetter, dartras, black bile, melancholy) impetigo (ringworm), pustule (pimple or boil) and granulation over the skin (corns).

Carrot leaf's decoction: is used in form of gargle and is useful for curing aphtha and tissue abscess in mouth and cures scratches and crevices of the skin and frost-bitten (nipped by cold) persons. Carrot root's lotion: resulted lotion from Carrot root's juice can be used for creation of facial complexion's mirthfulness and complexion of neck similar to lotion prepared by Gourd (Cucumber), Roman salad, Strawberry and else.

For regulating reconciliation of teeth in infants a narrow piece of it can be given to the infant to bite over it.

Carrot contains: oestrogénes (according to: L. Binet) that affects female sexual organ similar to effect of hormones.

Skin care: because of the valuable content in Carrot's root it has a great effect in care of body skin cells and their health care and Carrot is therefore entered in most health preparations such as in a kind of Balm compounded by Oily elixir of carrot, Sunflower oil, Oil of Wheat grain's sprouts (embryo) and Hazelnut oil that are used for providing the health care of the skin and keeping the skin mirthful and fresh, moistured and are smeared around the eyes, over the eyelids and over the cavity

behind the ears.

Affecting Carrot root's juice over facial skin turns the skin to bright one and cures some common skin disturbances as those used for persons suffering from fat skin (Yves Rocher).

Medical forms: Fresh carrot juice is used 2-3-times a day in deals of 30-100-grams of pure or diluted in water and also Thickened juice of Carrot root boiled with milk until it has a form as Honey are used as diuretic and for curing pectoral diseases (thoracic, breast diseases) and has been also recommended for removing infant's worms.

Carrot's sherbet (syrup): is prepared by 1-part of Fresh carrot root's juice, 2-parts of water and 4-parts of sugar and is used in dose of 1-cup before every meal or it's seeds (fruits) 30-50-per milles decoction or infusion in dose of 1-cup is used after every meal.

Traditional use: Carrot is consumed raw and cooked, in form of marmalade, can be found in markets because it grows in all seasons of a year and contrary to it's high nutritious value is cheap to buy.

Contrary to it's sweet taste Carrot does not turn to rotten, fetid, sour or grassy root and can be kept almost a long time, it is used in most Rice and nutritious soups, it is used in most countries industries in the world for preparing it's marmalade, compote (conserve) and it's juice and it's inspissated (thickened) juice are suitable food for children.

There are different specimens of Carrots that differ in being short or long, narrow with hard root or with a soft root and differ also in colour as red firey, golden yellow, violet, white violet, etc.

Carrot's different wild varieties grow in none ploughed land would grow a hard root or hard stick and lignificated root that are not edible for human beings but are used as high quality fodder for animals, but when the seeds of mentioned Wild carrots are seeded in mild ploughed land they grow mild, fragile and edible roots that are sweet and juicy.

Folks in Iran recognize following qualities for Carrot: Carrot is a good friend for the liver and increases the sight and sperms that in their turn produce a healthy embryo, carrot is better than anything else for driving old blood and replacing it by pure and fresh blood and for curing shortage of blood, curing diabetes, for reducing the blood's cholesterol (reduces fat in blood), for removing bilious digestion, for proper physical growth, for pregnant woman wishing to have strong and healthy child and for mothers wishing to increase their breast milk.

Carrot increases urine and cures persons suffering from cholesterol and clears the facial complexion and is a fine food for persons suffering from diarrhea. Carrot's sugar is not harmful to diabetics and on the contrary because of it's herbal insulin content is the cure for diabetes.



Carrot increases the reactionary capacity of the muscles and is the best medicine for patients suffering from kidney diseases and for addicted to nephritis (inflammation and pain of kidneys).

Consuming Carrot plays an effective role in regulating menstruation periods.

Carrot's poultice (salve): is a calmative in burning pains and sunstroke.

Consuming Carrots cures stomachache of infants and children (gripes, stomach tenesmus).

Mixturing Carrot's juice and milk: makes a lenitive juice for mitigation of breast and for removing of phlegm. Consuming Carrot has been recommended for persons suffering from voice coarseness and asthmatic persons and cures also persons suffering from respiratory organs dysfunction. Infants being sensitive to their mother's milk (can not bear it) can be fed by Carrot soup and for doing so it is better to feed them once with Carrot soup and once with their mother's milk.

Carrot juice mixtured in Honey and Lemon juice: makes a mirthful drink. There are 87-percents juice in Carrot that is easily absorbed by the body cells, it contains 1-2-grams of albumin and a phosphorous material that are similar to content of a yolk of an egg, mentioned materials are absorbed by glands and strengthens the glands and physical condition and increases sexual virility. Carrot contains a substance that changes in liver to A-vitamin and helps the resistance of the skin and mucous against skin diseases, prevents eczema, skin pustules and facial pimples of teenagers. Carrot contains A-vitamin that is the factor of growth and when the body lacks it causes that the body sores can not be healed during a normal period of time.

Warning:

Having a lot of Carrot requires a strong liver otherwise overdosing it can gradually lead to jaundice (chlorosis, paleness) disease.

Carrot because of it's content of A-and D-vitamins has a positive effect on glands and is a fine constructor of body cells and is useful for growth of infant's teeth by giving them Carrot soup or a small piece of it for chewing on it, in this way the toothgum itching would be cured and it also eases the growth of their new teeth. Another gift of Carrot is it's content of iron that it's deal in White carrot is a few times higher than the common orange-coloured Carrot. Carrot contains also sodium and potassium, magnesium and calcium.

For preparing a mirthful drink: after it's juice has been pressured a few drops of Lemon juice is added and then it should rest in cold area as in a refreezer in a way that the living factor of Carrot roots in the juice increases the level of it's sugar and it's mucilage and in this way turns into a mirthful drink though it would not smell as grass and it's taste and smell is changed into delicate ones.

Carrot's seed: is famous as Daucol and was formerly used in traditional medicine because it contains several times of materials that exists in Carrot's root and mostly because Carrot seed contains a kind of hormone, especially masculine hormone



famous as estrogene that many drug producers demand to get it. Carrot seed is abortive and prevents pregnancy, it has a major role in increasing sperms, it cures epilepsy, is a diuretic and in older traditional medicine was ordained for curing cough and for curing chronic breastache. Having of Carrot seed has carminative effect (antiflatulent) and neutralizes gasses and cracks kidney and urine-bladder's stones, makes a child delivery easier, cures weakness and pain of joints (arthralgia). Carrot seed is a useful remedy for curing prickly sensation (burning sensation) of stomach and stomachache of infants and is a useful medicine for curing hydropisie (dropsy) and curing abnormal enlargement of stomach sack. Cultivation of many different races of Carrot is done in many different areas in Iran but two subspecies famous as *Daucus maximus*. Ball., and *Daucus carota*. L., are mostly cultivated. Another close plant to Wild carrot is famous as *Ammodaucus leucorticus*. Coss. et Durieu.: is an annual plant that grows in desert lands and is also cultivated in Sudan, it's fruit is covered by rough hairs and is very odorous, is used for odouring foodstuff and as four-seasons (spice).

Growing zones: Carrot has been growing spontaneously in Iran's desert lands as it does today in province of Azerbaijan: around the city of Urumiya, in area of Dar-Band, around the city of Tabriz, Marand city, in North of Iran in Chaloos valley, in Darreye-Harir-rud, in province of Baluchistan: in Mokran and in province of Luristan, it is the famous Orange-coloured carrot that is available in markets throughout the world today.



Dill. E.

Anethum graveolens. L.,
Peucedanum graveolens. Benth. et Hock.,
Selinum anethum. Roth.
Umbelliferae. L.



Dill: is an annual plant and grows between 30-100-centimetres high with straight conic-shaped white root. Dill grows in Iran and Caucasia, in Ethiopia and Egypt, Southern Europe and in other different areas in the world in wild form and is also cultivated.

Dill's stem is cylindrical and lacks downs with longitudinal lines and depressions around it's knotted areas.

Dill's leaf: are also alternated leaves without downs and has divided lamina into thread-like divisions.

Dill's flower: it's flower is small and yellow and Honeybees are more or less interested in them and bring nectar from them. One characteristic of Dill plant is lack of involucre under it's main umbel and under it's subumbels.

Dill's fruit: is plane and elliptical and has bright chocolate brown colour, is 3-4-millimetres long and 3-millimetres wide, the callosities over it's surface that are thread-like and yellowish by enlargement under magnifying glass has wing-like edges with bright yellow colour.

Useful parts: useful parts of Dill are it's leaves and it's fruits.

Chemical substances: Dill's fruit contains 3-4-percents of essence that is extracted under effect of steaming or distillation by water.

Dill's essence is a dyeless fluid or is light yellow that is soluble in essence solvents and by adding sulphuric acid to Dill's essence it turns to dark yellow colour, it is not soluble in water but is soluble in it's equal weight of 90-degrees alcohol.

Dill's essence contains: right limonene and phéllandrene, 40-60-percents of right carvone similar to Black cumin's and little deal of solid paraphine.

Dill's essence of India: is extractable by half mashed fruit of Anethum sowa. Roxb., and under effect of steaming or distillation by water, it has a bright yellow to brown colour and has a rather intensive odour similar to Cumin's, is soluble in steady oils and creates a more or less dark solution and is practically insoluble in glycerine, it contains around 20-percents of cetenes and carvones and is used for odouring foodstuff.

Dills main plant is Anethum graveolens and is used for preparing a kind of bright yellowessence in North America that contains more cetenes and carvones. Dill's essence

should be kept in completely closed bottles in cool areas and away from light and sunshine.

Medical qualities: Dill's fruit has similar medicinal qualities as Fennel and Green anise, Black cumin and generally is a strengthener of stomach and is digestive, is carminative (antiflatulent) and is diuretic, is antispasmodic and is antiemetic (antivomitive), is calmative and increases secretion of milk.

External use: Dill's fruit is used externally for its lenitive and healing effects but its leaves are mostly used internally.

Dill's infusion: infusion prepared by Dill has calmative effect in case of stomachache and is used in curing vomition, is use as calmative in infant's gripes (stomach tenesmus), cures hiccups and is used in disability of rpeiling urine (strangury), it cures the reducement of secretion of nursing mother's milk, cures rheum (catarrh) of bronches, cures insomnia and its effect of increasing secretion of milk is definite.

Dill fruit's essence: is entered in some medicinal preparations for infants being nursed.

Dill fruits: are used in veterinary works for curing pain caused by flatulent in dose of 30-grams for quadruped animals as goat and sheep and 60-grams for larger animals and cattles. Dill's leaf and seed: are ued as flavour for odouring foodstuff.

Medical forms: Dill seed's 4-18-per milles infusion is used in dose of 2-3-cups per day after every meal. Dust of Dill seeds is used in dose of 2-3-grams a day. Dill's essence in dose of 0,25-1-gram poured over a cube sugar or mixed in a tisane (infusion). Distillated Dill fruit is used in dose of 50-100-grams in 24-hours. In external use a decoction of 50-100-per mille of Dill's leaves and Dill's flowering bransch tops is used for preparing a lotion.

Traditional use: Dill is similar to Fennel in some aspects and therefore has been famous as False fennel. Dill grows from Iran up to Southern France.

Dill strengthens the stomach and is appetizing, is an antidote against poisons, is calmative in case of stomachache and other pains, is diuretic and opens obstructed menstruations, has been recommended for curing asthma, hiccups and weak stomach, liver and spleen and breaks stones in kidnies and urine-bladder, prevents kidney colic and fetidness of food in stomach. Dill with Honey: is useful for rinsing poisons and is antiemetic (antivomitive). Cooked dill: cooking Dill's fresh leaves and its dried leaves and also its seeds are carminative (antiflatulent) and calmative in case of vomition and nausea and cooking them with meat (lamb meat) is useful against foam and fetid smell of mouth.

Dill contains C-vitamin and great deal of female hormones therefore consuming it increases secretion of milk and increases females sexual desire.

Dill's seeds contain: 3-4-percents of essence composited by several chemical compounds (solutions).

Dill's fruit (seed): has stimulative and carminative effects, strengthens the stomach,

increases secretion of milk and has been recommended for curing infants hiccups. Dill seed's infusion: is used in form of 4-8-per mille but it is better to have of it's distilled water and consume 5-100-grams dose of it.

Dill seeds are used in different kinds of spices and pickles in Iran and in many other countries in the world.

Growing zones: Dill is cultivated in numerous countries in agricultural fields as well as in home gardens. Dill grows in form of Wild and Half wild in Iran in province of Azerbaijan: around the cities of Tabriz, in province of Khorasan: around the area of Atrak between the cities of Shirvan, Bojnoord, in Tafresh and else.



Red currant,
Garnet-berry. E.
Ribes rubrum. L.,
Ribes hortense. Lam.,
Ribes pendulum. Salisb.
Saxifragaceae. L.

Red currant: is a shrub similar to Gooseberry (Groser; Ribes uva-crispa. L.) with brown stems.

Red currant's leaf: has a palmate shape similar to Grape-vine's leaf and has dentated lobes.



Red currant's flower: it has white and convened flowers in hanging racemes besides it's leaves.

Red currant fruit: it's fruits are red-coloured but in riped ones are red yellow.

Red currant grows in different areas of Europe, Siberia and many different hybrids are developed by them.

Useful parts: it's useful parts are it's fruits and is cultivated but is lesser motivated for medicinal aims.



Chemical substances: Every Red currant's berry contains 83-87-percents of sugar mixtured by lulose and dextrose in equal deals, 1,8-2,60-percents of free organic acids, especially citric acid, 1,5-percent petine, 0,41-percents pentosan, 0,35-0,70-percents albuminoid materials, around 4-percents of cellulose, a dye material (by: Willstaeter and Bolton) that is cyanidine glucoside and turns the wool to yellow colour.



Red currant's seed: contains 16-18-percents oil materials and different solutions but is not used for extraction of oil. Medical qualities: Raw red currant berries: are appetizing and consuming it's berries is useful for weak stomach not disgesting food properly (Dr. Leclerc.), consuming Raw red currant berries strengthens the peristaltic motions of intestines (peristaltis) and digestive functions, are useful for curing inflammation of digestive organs and chronic gastroenteriris, scorbute and resistant against skin diseases and are suitable food and for their diuretic effect are useful in curing hydropisie (dropsy), cracking kidney stone and urinal sediments and are useful in curing rheumatism and gout.

Juice of Red currant: is used for similar mentioned diseases and is used in doses of 100-500-grams per day and used divided in 2-3-times during a day.

Dried red currant: it's dried berries are used in form of dust or infusion and has same medical qualities as mentioned above.



External use: Mashed leaves of Red currant's shrub is used in form of poultice for healing cuts and sores.

Jelly of Red currant berries: is used in form of poultice for healing burn injuries and should be used at once after burn injuries for calming pain and for prevention of inflammation.

Red currant berries are entered in different medicinal preparations.

Red currant's shrub: has different varieties but it's wild specimens are not found in Iran and it's different cultivated shrubs are cultivated in Vineyards.



Black currant,
Quinsy-berry. E.
Ribes nigrum. L.,
Ribes boreale. Turcz.,
Ribes pauciflorum. Turcz.
Saxifragaceae. L.



Black currant or Quinsy-berry: is a shrub and grows between 1,5-2-metres.

Black currant's leaf: every leaf is divided in lesser lobes and has small dentates and has small yellow observable resinous glands over it's lamina's inferior surface.

Black currant's berry (fruit): is black-coloured and grows in form of small convened hanging racemes.

Black currant (Quinsy-berry) in form of wild and adopted grows in humid forests and margins of farms, lagoon (marsh lands) areas and in dept of valleys and is cultivated in some areas. Honeybees are not interested in it's flowers despite a great deal of nectar in it's flowers. Medical qualities: useful parts of Black currant shrub are it's leaves and it's root. Chemical substances: Leaf and green organs of Black currant's shrub contain tannin and emulsion and an essence with bright green colour.

Black currant's fruit juice: it's fruit juice contains 10-13-percents of different sugars and emulsion, pectin, 2,6-3,70-percents organic acids as citric and vinic acids and it's content of C-vitamin is higher than most fruits and is equal to 150-200-milligrams of it's fruit, resistance of it's C-vitamin is higher than C-vitamin in most fruits against the effect of heat and oxygene (R. Charonnat and his group).

Black currant's sherbet (Quinsy-berrys sherbet): it's sherbet while preparing it looses 15-percents of it's C-vitamin but after a year looses 70-percents of it's C-vitamins.

Quinsy-berry (Black currant): was not known by Romans and ancient people of Greece and was not used in form of medicine but it's usage started to be common in 1800-century in medicinal treatments.

During the beginning of 1800-century for the first time the famous Abbé Bailly described it's surprising medical qualities and mentioned it's liquor extracted from it as Elixir of life (Elixir de vie) and described the Black currant shrub as to have 1000-medical effects and so using the mentioned elixir turned into a common one in area of Dijon in France.

Internal use: infusion of Black currant's leaves and branch tops has diuretic and antirheumatical effects (F. Cecaux and Hucard.) and has more or less strenghtening effect, is constipating, perpirative and has been recommended in gout and arthritis (inflammation of joints), is used in anasarca (tissuedropsy) and kidney stone, it has the