

Medical Botany

10: Some common plants used in
veterinary medicine- continued

Field pumpkin (*Cucurbita pepo* L.)



Diğer isimler: Balkabağı, Sakızkabağı.

Aile: Kabakgiller (*Cucurbitaceae*).

Kullanılan kısım

Tohumları/çekirdekleri (Semen cucurbitae peponi)

Cucurbita pepo



Assorted cultivars, from top-left, clockwise: pattypan squash, yellow summer squash, a large zucchini (or marrow), and pumpkins

Scientific classification

Kingdom:	Plantae
Clade:	Angiosperms
Clade:	Eudicots
Clade:	Rosids
Order:	Cucurbitales
Family:	Cucurbitaceae
Genus:	<i>Cucurbita</i>
Species:	<i>C. pepo</i>

Binomial name

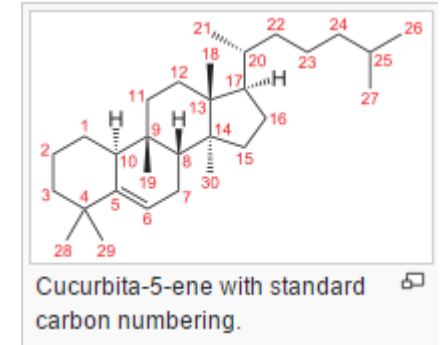
Cucurbita pepo
L.

Subspecies^[1]

- *Cucurbita pepo* subsp. *fraterna*
- *Cucurbita pepo* subsp. *pepo*
- *Cucurbita pepo* subsp. *texana*

Field pumpkin (*Cucurbita pepo* L.)-2

Active compounds pumpkin seeds-in Amino acids (0.2-0.7% kukurbitin) Kukurbitasin (tetracyclic triterpene derivative)-steroids, triterpene hydrocarbons called kukurbitan by generating and Glycoside. Mucilage Steroids (% 1) Sterols (0.5%; 24-alkilsterol "β-5-sterols," β-7-sterols ") β-Sitosterol Fixed oil (40-60%; linoleic acid, oleic acid



Cucurbitacin A

Cucurbitacin B

Cucurbitacin C

Cucurbitacin D

Cucurbitacin E

Cucurbitacin F

Cucurbitacin G

Cucurbitacin H

Cucurbitacin I

Cucurbitacin J

Cucurbitacin K

Cucurbitacin L

Cucurbitacin O

Cucurbitacin P

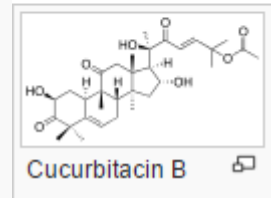
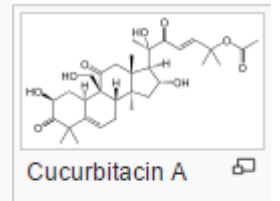
Cucurbitacin Q

Cucurbitacin R

Cucurbitacin S

Cucurbitacin T

28/29 Norcucurbitacins



Field pumpkin (*Cucurbita pepo* L.)-3

55% effective
against *Taenia*
saginata cucurbitine
in dust, . pumpkin
seed

**Domain Anthelmintic (seatworm, strips; cucurbita) diuretic
Prostate tumors (I-II periods) and on the other hand,
prevents Inflammation and Use benign/Dose, but rather is
used to zoom out the Wolf and strips. Shell has been robbed
after being transformed into dust seed or kernel, 30 in dogs-
100 g of honey or milk while hungry by participating is
applied; This 60 min after giving laxative parasites.**



barberry (*Berberis vulgaris* L.)



Berberis vulgaris^[1]

Scientific classification

Kingdom:	Plantae
(unranked):	Angiosperms
(unranked):	Eudicots
Order:	Ranunculales
Family:	Berberidaceae
Genus:	<i>Berberis</i>
Species:	<i>B. vulgaris</i>

Binomial name

Berberis vulgaris

L.

Other names: Amberparis, Dikenüzümü, Karamukağacı, Sariağaç, Salome. Family: barberrygiller (Berberidaceae). Contour: the Black Sea (Kastamonu, Samsun), Thrace. İstanbul is found widely around. The part used root bark (Cortex Berber Kala radi) (Fructus Berber Kala) leaf (Folium Berber Kala)

barberry (*Berberis vulgaris* L.)-2

Active compounds roots

; izokuinolin alkaloids

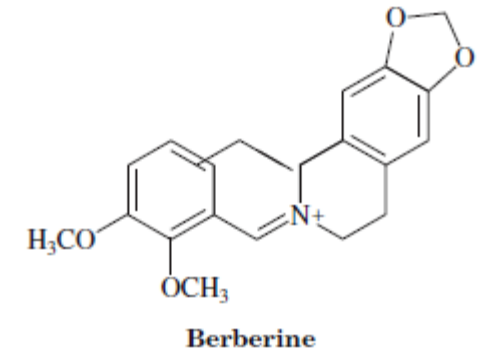
(umbellatin', berbamin,
kolumbamin, oksiakantin
' , palma, yatrorrhizin)

Mucilage Resinous
compounds are

Aromatic; Ascorbic acid

Apple and lemon acids

Rubber Pectin in leaves
and flowers; Alkaloidler
(Barber)



barberry (*Berberis vulgaris* L.)-3

- Wheat mildew fungus (*Puccinia gram affinis*) Canada and the United States for breeding is the tool in some parts of the production yasaklanmuş.

barberry (*Berberis vulgaris* L.)-4

The effect is a versatile effects the barber shop. The collection of fluid in the intestines, bacterial enterotoksin shape, smooth muscle spasms, Ion secretion, Cardiac fibrillation, Trombositlerin clustering. The effect of Class-III heart beats similar to drugs that prevent the irregular; AP duration and refraktor period extends.

barberry (*Berberis vulgaris* L.)-5

- **Effect-go Anti-diagnosis (kidney and cardiovascular system diseases modulates the level of prostaglandins) increases the secretion of bile and bilirubin. Antiparasitic (antel mintik-antigiardial, nematosidal-Toxocara canis, seatworm). Ake prevents the effectiveness. Adrenergic receptor antagonist is effective. Antibacterial effect of resistance to fast. Effect of interval endometritte eye diseases (52% improvement in intrauterin growth retardation application)**



barberry (*Berberis vulgaris* L.)-6



Cytochrome p450 drug interactions with drugs metabolized by CYP3A4: antiadrenergic agents, antiarrhythmic, antibiotics (tetracyclines), central nervous system suppressive drugs, cyclophosphamide, cardiac Glycoside, antihypertensive, General anesthetic Unwanted effects of lethargy, skin and eye problems, hypotension, dyspnea, gastrointestinal disorders, nephritis, nausea Berberinin Phototoxic effects.

barberry (*Berberis vulgaris* L.)-7



The use of animals in small Dry plant: 25-3000 mg/kg,
Infused/dekoksiyon: 5-10 g water 1/4, 1/2 10 kg animal to be given.
25-60% ethanollü extract: 10 kg animal 1:2-1:3: 05.5--Muslims
speaking-1.5 ml



Queen of the night (*Selenicereus grandiflorus* L.)



Queen of the Night



Scientific classification

Kingdom:	Plantae
(unranked):	Angiosperms
(unranked):	Eudicots
(unranked):	Core eudicots
Order:	Caryophyllales
Family:	Cactaceae
Subfamily:	Cactoideae
Tribe:	Hylocereeae
Genus:	<i>Selenicereus</i>
Species:	<i>S. grandiflorus</i>

Binomial name

Selenicereus grandiflorus
(L.) Britton & Rose, (1909) Contr. US
Nat. Herb. 2:430

Other names: prickly pear cactus. Cactus grandiflorus L./Cereus grandiflorus (L.) Miller Family: Cactus (Cactaceae).

Queen of the night (*Selenicereus grandiflorus* L.)

Main compounds

The Petals;	(% 0.02;
Betasiyaninler	izorhamnetin-3β-
Flavonol	galaktosid) Narcissin
Glycoside (1.5%)	(0.05%; likorin,
Flavonol	izorhamnetin-3β-rutinosid)
Glycoside major (along	routine (rutosid, kuerse-3-
with other names)	rutinosid), along with
Hiperin	similar flavonoids in the
(hiperosid, kuerse-3β-D-	body section of the plant;
galaktopiranosid)	N-methyl N, N-dimethyl I
Grandiflorin (kaempfer-3β-	put out my (Horde) amines
L-arabinosid)	such as foods with Tyramin
İzorhamnetin-3-0-β-	(0.3% dry basis). All parts
(ksilosil)-rutinosid	of the plant; Wicks Mucus
İzorhamnetin-3-0-β-	Resin Glycoside are Oils
(galaktosil)-rutinosid	
Kaempferitin (kaempfer-3,	
7-0-dirhamnosid) Kaktisin	



Queen of the night (*Selenicereus grandiflorus* L.)

- **effect of the heart and items that are in the motor nerve stimulates the spinal cord, raises blood pressure. The effects of stimulating my tyranny etc materials (indirect-acting sympathomimetic) thought to have been coming forward; alone, these substances can create any effect in the amount of plant. Contained Flavonoids; Reduces the permeability of the veins and increases the durability. Lowers blood pressure. Corrects heart beat irregularities**



Queen of the night (*Selenicereus grandiflorus* L.)



- Positive inotropic effect. Drug interactions Cardiac drugs oxidase inhibitors kardiyoaktif Glycoside and Application sent immediately after the animals segment, and must only be used in the form of dilute solution (1:100)



The European Agency for the Evaluation of Medicinal Products
Veterinary Medicines Evaluation Unit

EMEA/MRL/601/99-FINAL
April 1999


COMMITTEE FOR VETERINARY MEDICINAL PRODUCTS

SELENICEREUS GRANDIFLORUS

Black pepper(*Piper nigrum* L.)



Black pepper



Pepper plant with immature peppercorns

Scientific classification

Kingdom: *Plantae*
(unranked): *Angiosperms*
(unranked): *Magnoliids*
Order: *Piperales*
Family: *Piperaceae*
Genus: *Piper*
Species: ***P. nigrum***

Binomial name

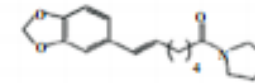
Piper nigrum
L.^[1]

Other names: *Pipera nigra* L. **Family:** *Piperaceae* (*Piperaceae*).

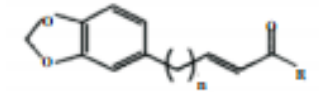
Distribution: India and East India Islands. **The part used** Fruits (*Fructus piperis nigricans*; gather before ripening dries) these are delicious, tangy, burning and pain

Black pepper (*Piper nigrum* L.)-2

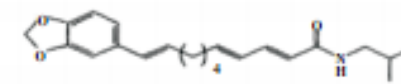
- Anabileşenler Bitter substances Alkaloid (5%-9; piperin) Starch Resin Acılığı Essential ingredients, contained the scent of essential oil and resin piperin, comes forth from.



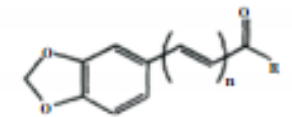
(a) Piperamide



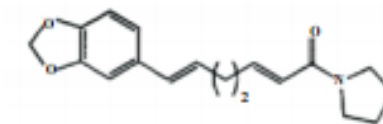
(b) Piperamine



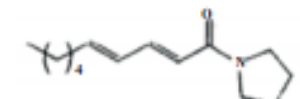
(c) Pipericide



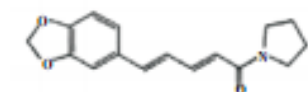
(d) Piperine



(e) Sarmentosine



(f) Sarmentine



(g) Trichosta

Figure 2: Some important derivatives of *P. nigrum*.

Black pepper(*Piper nigrum* L.)-3

- **The effect is a bitter substance. Vessel narrowing. Constricts the Airways. Delays the emptying of the digestive tract. Vanilloid receptor agonist. Hemorrhoids, cold Antelmintik, antitripanazomal Use/Dose pill, easing to digest plenty of appetizing an aphrodisiac, Putty and infusion; Horses and**

**cattle: 5-25 g: 2-5 g Dog:
0.3-0.5 g**



Black pepper(*Piper nigrum* L.)-4



- Inflammaturar diseases should be used with caution. Cytochrome p450 enzyme to metabolize the drug interactions with drugs, barbiturates, NSAIDS, propranolol, metilk view, if you are



Black pepper (*Piper nigrum* L.)-5

Use of black pepper (*Piper nigrum*) as feed additive in broilers diet

Galib A. M. Al-Kassie¹, Mamdooh A. M. Al-Nasrawi², Saba J. Ajeena³

Different effect of *P. nigrum* and Piperine

Piperine inhibit ascorbate-Fe⁺⁺-induced lipid peroxidation
Piperine protected against oxidative stress induced carcinogenesis
Protection against diabetes induced oxidative stress
Inhibition / quenching of super oxides and hydroxyl radicals by piperine
Piperine protects Cu⁺⁺-induced lipid per-oxidation
Decreased mitochondrial lipid peroxidation
Dietary black pepper/piperine reduces high fat diet induced oxidative stress
Inhibition of aryl hydroxylation
Decreased UDP-glucuronic acid concentration
Inhibition of O-deethylase activities in pulmonary microsomes
Inhibition of UDP-glucose dehydrogenase and UDP-glucuronyl transferase
Increased bioavailability of vaccine and sparteine
Enhanced systemic availability of propranolol and theo-phylline
Increased serum concentration
Delayed elimination of anti-epileptic drug
Enhanced bioavailability of β -lactam antibiotics
Increased plasma levels and delayed excretion of epigallo-catechin-3-gallate
Stimulation of digestive enzymes of Pancreas by dietary piperine
Increased orocecal transit time
Black pepper increased gastric acid secretion
Piperine modulated the membrane dynamics and permea-tion characteristics,
Reducing mutational events
Tumour inhibitory activity
Anti-metastatic activity of piperine on lung metastasis
Chemopreventive effect
Thermogenic action of piperine via adrenal catecholamine secretion
Growth stimulatory activity
Anti-thyroid activity
Piperine inhibited mitochondrial oxidative phosphorylation
Piperine exerted protection against t-butyl hydroperoxide
Piperine promoted cytotoxicity induced by benzo(α)pyrene
Piperine potentiated hepatotoxicity of carbon tetrachloride in rats

- Broilerlerde eating 0.50%-0.75-1 increase in body weight, feed consumption, when the increase in the overall performance was recorded and can be seen to increase.



Anti-apoptotic
Antibacterial
Anti-Colon toxin
Antidepressant
Antifungal
Analgesic
Antidiarrhoeal
Anti-inflammatory
Antimutagenic
Anti-metastatic activity
Antioxidative
Antiriyretic
Immuno-modulatory
Antispasmodic
Asthma, obesity, sinus
Antispermatic
Antithyroid
Antitumor
Ciprofloxacin potentiator
Colic
Cold extremities
Gastric ailments
Hepatoprotective
Increase plasma
Increase pancreatic enzymes
Inhibit cytochrome
Inhibit transcription
Insecticidal activity
Intermittent fever
Larvisidal activity
Pesticidal activity

Black mustard(*Brassica nigra* (L.) Koch.)



Other names: Eşekhardalı, Eşekturpu, Siyahhardal. **Sinapis nigra** L. **Family:** Hardalgiller (Brassicaceae/Cruciferae). **Description:** yellow-flowered, annual herbaceous plant. It is found in Europe and Anatolia: the Iran. **Similar species:** *Brassica elongata* Ehrh., *b. the fee* Lam., *b. napus* L., *esculenta* DC., *b. oleracea* L., *capitata* L., *b. oleracea* L. var. *botrytis* L., *b. rapa* L., *b. rapa. esculenta* G.G.

Brassica nigra

Scientific classification

Kingdom: [Plantae](#)
(unranked): [Angiosperms](#)
(unranked): [Eudicots](#)
(unranked): [Rosids](#)
Order: [Brassicales](#)
Family: [Brassicaceae](#)
Genus: [Brassica](#)
Species: ***B. nigra***

Binomial name

Brassica nigra
L.

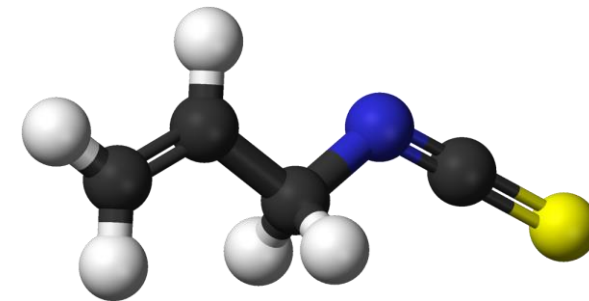
Black mustard (*Brassica nigra* (L.) Koch.)-2

- The part used Seed (Semen sinapis nigrae, Mustard seed) Oil (Oleum sinapis; Mustard oil) Fire (Carta sinapisata) between the months of August and September. 0.5-1 mm in diameter, dark-red-blackish-gray, globe-shaped pellets. All, then, is odorless; emits the smell of custom as being crushed mustard; the taste is insipid, then before.



Black mustard (*Brassica nigra* (L.) Koch.)-3

- Allilzotiyosiyanat $\text{H}_2\text{C}=\text{CH}-\text{CH}_2-\text{NCS}$ in the domain (organosulfur compound, mustard oil, oral lethal dose 0.34 g/kg-toxic-extremely may cause severe skin dermal become stagnant is applied) is an effective antimicrobial, anti-cancer substance. When it is applied through the skin; İrkilti, jabbing pain and increased blood flow yangıya long exposure also leads to wounds and ulcers.



Black mustard (*Brassica nigra* (L.) Koch.)-4



Drug interactions with medications that are metabolized by CYP1A2. Antikoagulanlar, CYP1A2 Warning are lots of application should be avoided (individual applications) and should be sent to the sector immediately after application.



The European Agency for the Evaluation of Medicinal Products
Veterinary Medicines Evaluation Unit

EMA/MRL/421/98-FINAL
June 1998

COMMITTEE FOR VETERINARY MEDICINAL PRODUCTS

SINAPIS NIGRAE SEMEN

Comfrey (*Symphytum officinale* L.)



Other names: Mayasilotu. *S. asperum* Lepech., *s. tuberosum* L..
Family: Boraginaceae (Boroginaceae). **Distribution:** in our country, Bursa and Trabzon-grows in the Zigana mountain. **The part used** root (*Radix symphyti*) Rhizome (*Rhizoma symphyti*) Leaves (*Folia symphyti*)

Symphytum officinale



Scientific classification

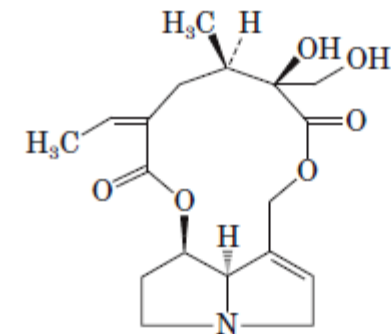
Kingdom:	Plantae
(unranked):	Angiosperms
(unranked):	Eudicots
(unranked):	Asterids
Order:	(unplaced)
Family:	Boraginaceae
Genus:	<i>Symphytum</i>
Species:	<i>S. officinale</i>

Binomial name

Symphytum officinale
L.

Comfrey (*Symphytum officinale* L.)-2

- Leaf: Mucilage, tannins, allantoin, simfatin (symphyt), Omega, BirB12
root: Allantoin, mucilage, phytosterols, teriterpenoid (isobauren), phenolic compounds, (kafeik, chlorogenic, litospermik acid), inülin, resin, starch, gum. Dieğr: Vitamins (riboflavin, niacin, Pantothenic acid, vit B12, vitA, vitC, vitE).



Pyrrolizidine alkaloid

Comfrey (*Symphytum officinale* L.)-3

- **Inflammation of the stomach pain relief effect of Light shoots to wound healing preventive protect preventive Accelerator (the effects of rosmarinic particularly allantoin and related end) Softening effects. Coughing and bronchial irritation. Glikoalkaloidler, prints the CNS. Litospermik acid prevents the release of pituitary gonadotrophin from.**



Comfrey (*Symphytum officinale* L.)-4

Perineum in rheumatoid arthritis damage tendons and be u
periosteum and bone damage to increase Callus formation o
for gastric and duodenal ulcer as supportive in the traumatic eye
wounds in (blepharitis, conjunctivitis)



Comfrey (*Symphytum officinale* L.)-5

- Can cause death in internal use (you alkaloids pirolizi hepatotoksik), the European Commission proposes to use externally only. Carcinogenic Externally wound in use on tissue and can cause the formation of abscess formation. Teratogenic, mutagenic, fötotoksin, human lymphocyte chromosomal damage in pregnant women and should not be used in milked-.



Clove (*Syzygium aromaticum* (L.) Merr et Perry)



Clove

Scientific classification

Kingdom: [Plantae](#)
(unranked): [Angiosperms](#)
(unranked): [Eudicots](#)
(unranked): [Rosids](#)
Order: [Myrtales](#)
Family: [Myrtaceae](#)
Genus: [Syzygium](#)
Species: ***S. aromaticum***

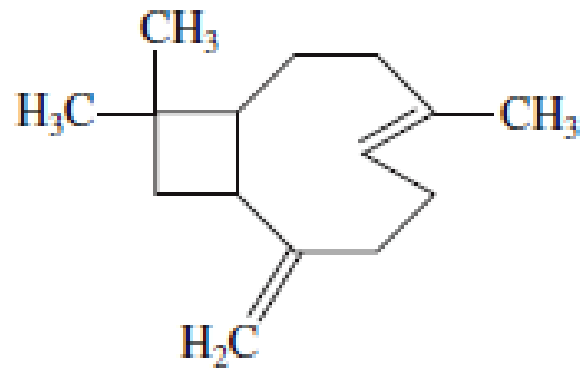
Binomial name

Syzygium aromaticum
(L.) Merrill & Perry

Other names: *Eugenia caryophyllus* Thunb./*E. aromatica* (L.) Baill, *Caryophyllus aromaticus* L./*Jambosa caryophyllus* (Spreng.) Nied./*Myrtus caryophyllus* Spreng.
Family: Myrtaceae (Myrtaceae). **Distribution:** Molluk Islands, Zanzibar and the surrounding islands are raised in. **The part used** Flower buds (Flores caryophylli) Oil (Clove oil)

Clove (*Syzygium aromaticum* (L.) Merr et Perry)-2

**Content of essential oil (20%)-Okechukwu, Okechukwu Sarah acetate,
Alpha and beta karyofilen**



Caryophyllene



Clove(*Syzygium aromaticum* (L.) Merr et Perry)-3

Fragrant effect-relaxing (aromatic) pain relief – local anesthetic Antihistamine Antimicrobial (bacteria, fungi, viruses, etc.) Antiseptic Liver protective antispasmodic Yükseltgenmeyi preventive effects.



Clove tree flowers



Dried cloves

Clove (*Syzygium aromaticum* (L.) Merr et Perry)-4

- Dentistry dental treatment is exposed due to the influence of local pain relief during. COX and LOX activity. Trombositlerin prevents the build-up of a strong. Öjenol acetate and strengthens the effect of the trip metilöjen Saran. Clove oil Honey Bee larvae in Bacillus (us yavruçürüklüğü) and Ascospaera apis (Lime disease)-prevents the development of reproduction-is used in preventive medicine.

Clove (*Syzygium aromaticum* (L.) Merr et Perry)-5



- Clove oil fish (Trout children) is a good anesthetic for; 40-60 ppm (40-60 mg/L) Okechukwu Sarah anesthesia usually provides quick entry and exit.



Black cohosh (*Actaea racemosa* L.)

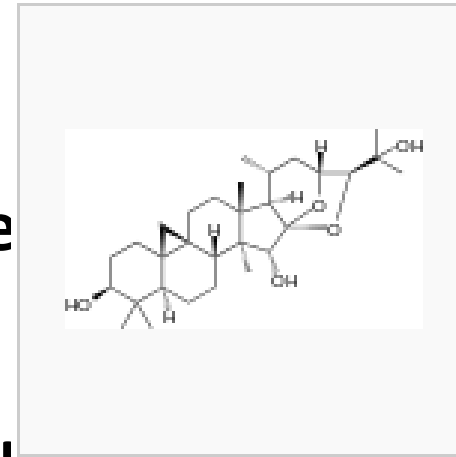


Other names: Chotima, Karayılankökü, Cohosh. *Cimicifuga racemosa* (L.) Nutt. **Family:** Kurtboğangiller (Ranunculaceae). (Racemosae Rhizoma) parts that are used in some countries has been presented with the trade name Remifemin tablet; each tablet 20 mg 1 mg you root against the active ingredient named 26-deoksiake.

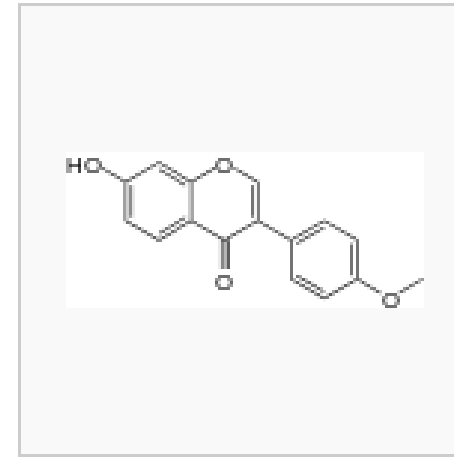
<i>Actaea racemosa</i>	
	
Scientific classification	
Kingdom:	Plantae
(unranked):	Angiosperms
(unranked):	Eudicots
Order:	Ranunculales
Family:	Ranunculaceae
Genus:	<i>Actaea</i>
Species:	<i>A. racemosa</i>
Binomial name	
<i>Actaea racemosa</i>	
L.	

Black cohosh (*Actaea racemosa* L.)

- **Content Triterpene compounds, alkaloids, izofe acid and salicylic acid effective substances. Triterpene compounds; (c imigenol) LH release and estrogenic receptors blocked (especially w/ used with longer) reduces the hypothalamic-pituitary system to help decompose cholesterol effects; reproductive, nervous, cardiovascular system leads to many secondary effect. izoflavonoidler (formononetin) prevents Uterine estrogen receptors as local competition.**



Cimigenol a constituent



Formononetin a



Black cohosh (*Actaea racemosa* L.)

**Effects of Antispasmodic sedative, preventive, Ça
cholesterol lowering, menstrual bleeding also has
Nicotinic acetylcholine-mediated inhibits alerts (n
antispasmodic effect) Asthma, perodik convulsio
in neural eksitabilite, hysteria (used in behavioral**



Black cohosh (*Actaea racemosa* L.)

- Is uterine stimulant-spontaneous aborta (but first pregnancy 1/3-point shootout challenge reducing uterine spasm during the period and antiabortif effects) with prolonged hepatotoxicity declared Dried plant: 25-200 mg/kg infusion can be used in the form of dekoksiyon, etnaollü statement/.



Strychnos (*Strychnos toxifera* L.)



Strychnos



Strychnos toxifera

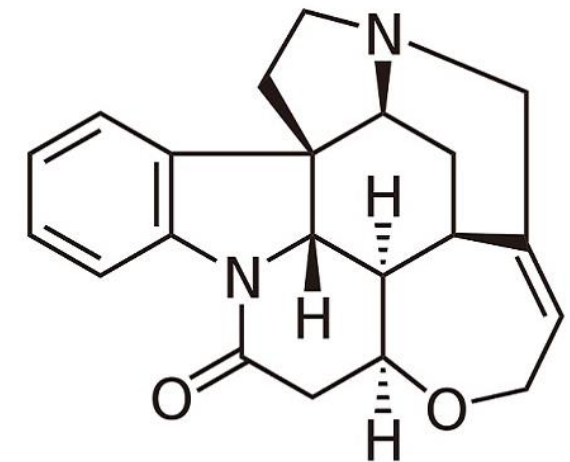
Scientific classification

Kingdom:	Plantae
(unranked):	Angiosperms
(unranked):	Eudicots
(unranked):	Asterids
Order:	Gentianales
Family:	Loganiaceae
Genus:	Strychnos
	L.

Other names: Kargagözü. **Strychnos nux-vomica** L. **Family:** Yasemingiller (Loganiaceae). **Distribution:** India, Southeast Asia and grows in North Australia. **The part used** Tincture (Teint.de noix vomique) Seed (Semen strychni) Powder (Poudre de noix vomique)

Strychnos (*Strychnos toxifera* L.)

- Anabileşenler Tohumlarda (fruit) Alkaloidler (% 2-5) Glycoside (loga) Fixed oil Alkaloidlerin 1.2% 1.6% of strychnine, the bru you; 12-15-hidroksist of the hidroksist and there is also a of the lyrics. Grain alcoholic extract and tincture of 16%, 0.25% alkaloids. Strychnine preparation of equivalent is as follows: 100 mg powder = 16 mg extract = 1000 mg of tincture; These are the 2.5 mg Total alkaloids.



Strychnos (*Strychnos toxifera* L.)

- **Appetizing** Force days for Beef: 100 g (i.e. 3 transmitter Used sexual g seed) sheep and goat: enhancement effect/dose 7.8 g cut Milk calf: 15 g because of the Bitter Taste lamb cut Milk: Tincture 5 g Nux Vomica to promote horses and cattle: 16-32 ml Appetite increase salivary sheep and goat: 1-4 ml flow easier to digest is used to stimulate the nervous system. (spinal stimulant) Racehorses use is forbidden. Nux Vomica seeds or powder preparation containing 3% Romanian laziness in 2-7



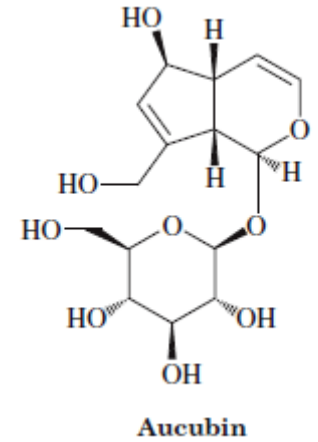
psyllium (*Plantago psyllium* L.)



Other names: Sinirliot. *P. scabra* UR Moench/*P. arenaria* Waldst. et Kit. **Family:** Sinirliotgiller (Plantaginaceae). **Similar species:** *p. afra* L., *p. ovata*, Forskal. **Description:** leaves and hairy body, annual, herbaceous plant. **Distribution:** in many places in our country (Thrace, İstanbul, Western Anatolia, Nif dağı, Gaziantep, Adana, etc.). **The part used** Seeds (*Sandor psyllii*, *Semen plantag affinis*) Fruits are picked when they have matured, and seeds.

psyllium (*Plantago psyllium* L.)-2

Content Iridoidler (aucubin, katalp), mucilage, phenolic acids, flavonoids (apige, skutellarin, baikalein, nepetin, plantagosid), tannins, saponins, coumarin. Clinical effect of Antiinflammatur, astrinjent (simmer down converter), demül aabsent (inflammatory, irritation)



psyllium (*Plantago psyllium* L.)-3

- **In the digestive tract for digestion of softening effects of Laxative by absorbing water swells w comes to rehydrate (gelatinous mass); mass Enhancer laxative as the mRNA. Laxative effect 24 hours. to peak two to three times a day; It may take more than 3-4 days. Is very effective in sand gripes in horses; meet the sand is very effective in the collection and kayganlaştırılarak.**



Valerian (*Valeriana officinalis* L.)



Valerian



Scientific classification

Kingdom:	Plantae
(unranked):	Angiosperms
(unranked):	Eudicots
(unranked):	Asterids
Order:	Dipsacales
Family:	Caprifoliaceae
Genus:	<i>Valeriana</i>
Species:	<i>V. officinalis</i>

Binomial name

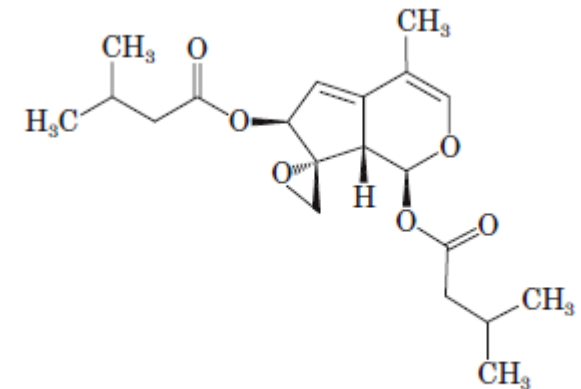
Valeriana officinalis
L.

Other names: Çobankamışı, Şifalikediotu. **Family:** Valerianaceae (Valerianaceae).

Description: white-flowered, perennial, herbaceous plant. **Distribution:** Uludag, Kayseri, Grady, Baker-Erzurum between. 200 in the world, Turkey has about 10 in the Valerian plant. **The part used** root (*Radix valerianae*) Rhizome (*Rhizoma valerianae*) Oil (*Oleum valerianae*)

Valerian (*Valeriana officinalis* L.)-2

The content of essential oil (alpha and beta pinene, Borneol), sesquiterpene (valerane with mevalonic acid, valeranone), valerin, phenolic acids. Dried root, gamma-aminobutyric acid (GABA), however there is no statement of an alcoholic. Striped Convulsive preventive muscle relaxant effect of antispasmodic Sedative/doğurucu (sedative/hypnotic)



Valepotriate

Valerian (*Valeriana officinalis* L.)-3



- Soothing/antispasmodic effects of GABAergic nerves intermediation (at GABA_A-RS stimulation, GABA-uptake inhibition of Synapse range, such as the prevention of GABA metabolism) may be involved; valepotriat, valerin acid and essential oil ingredients affects these receptors (the amygdala in the brain region) there are also the barbiturate-like effect on the CNS. (Lignans-you're hidroksipinore) Fractionation Lignans built item (you're hidroksipinore) binds to the benzodiazepine receptor. MSS valepotriat and seskiterpen found in the oil of impact to come forward. Valepotriatlar and seskiterpen are-free aqueous extracts (GABA) trunklizan/anxiety-relieving, calming/sleep dođurucu creates the domain. Valepotriatlar is effective for soothing on the OSS.

Valerian (*Valeriana officinalis* L.)-4




- Tachycardia may result. Barbiturates and other central nervous system suppressor can interact with. Cat-dog: 25-300 mg/kg of dried root, 10 kg animal 5-10 g (1 cup water) 1/2-1/4 as dekoksiyon, 45-55 ethanollü statement 1:2-1:3: 0.5-1.5 mL (10 kg): 30-60 ml of fluid extract, oil (2-4 ml) farm animals: liquid statement (30-60 ml of cows; sheep-goat: 4-8 ml,; oil cattle 2-4 ml; sheep-goat 0.6-0.8 ml)

Red pepper (*Capsicum annuum* L.)



Other names: Hintbiberi, Türkbiberi. **Family:** Solanaceae (Nightshade Family). **Similar species:** *c. Frutescens* L. **The part used** dried fruit (Capsicum, Fructus caps) Oleo-resin (Capsicum Oleoresin capsicum)

Capsicum annuum



Scientific classification

Kingdom:	Plantae
(unranked):	Angiosperms
(unranked):	Eudicots
(unranked):	Asterids
Order:	Solanales
Family:	Solanaceae
Genus:	<i>Capsicum</i>
Species:	<i>C. annuum</i>

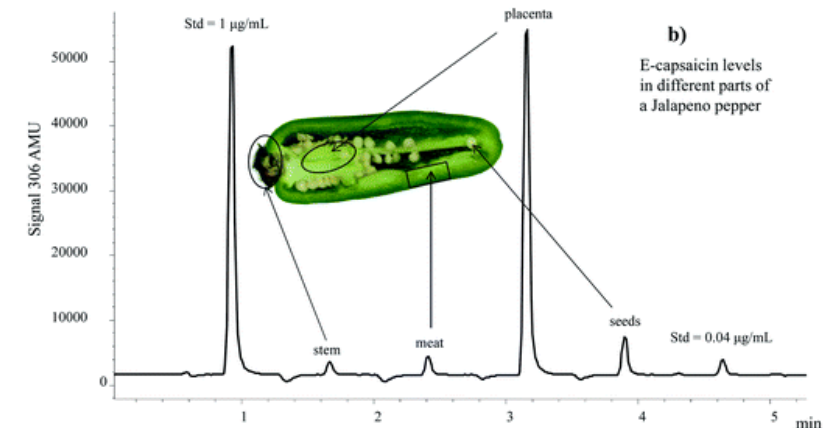
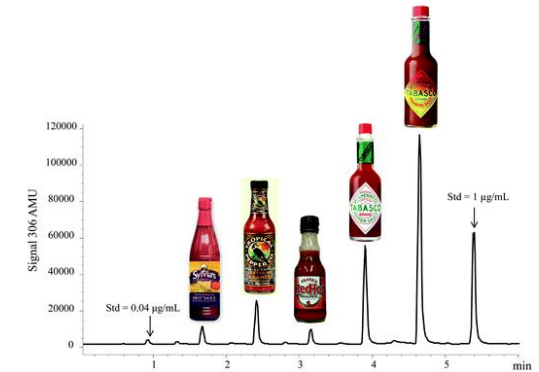
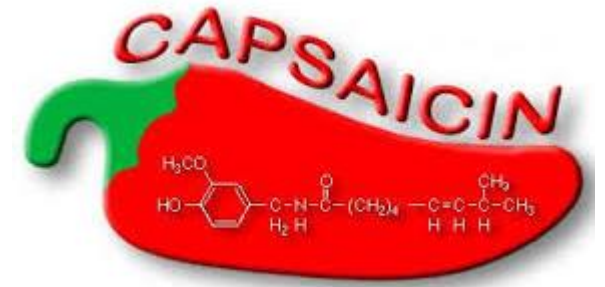
Binomial name

Capsicum annuum
L.

Red pepper (*Capsicum annuum* L.)-2

- Active compounds dried fruits contain capsaicin which is 0.3-1% sinoid% 63-77 capsaicin (8-methyl-n-vanilil-6-nonenamid) dihidrokaspai 20%-32% 1-8 nor-dihidrokaspai you a small amount of other derivatives, flavonoids, Ascorbic acid of capsaicin (dry pepper 95-150 mg/100 g) Carotenoids

(% 0.3-0.5) Fixed oils essential oil product (over 125) paprika oleoresin is usually one is a 1.5%; < for not less than 8% capsaicin.



Red pepper (*Capsicum annuum* L.)-3

- Influence of capsaicin or dihidrokapsai you are extremely bitter; even when the pain is felt in the 16 million solid dispersant; the term is associated with that property continue to consume system resources, such as the bitter pepper. Through the skin is extremely >% 1 preparations become stagnant. Capsaicin is an important part of that use (> 40%) consists of the combustion and jabbing pain; but, when used three times a day he repeated these decreases and disappears. When applied to the skin on the outside, to attack the skin, redness and blood leads; jabbing or burning sensation on the skin, warm/sensation is detected. This effect occurs in two stages. The initial short-term local, specifically improving the release of P-substance (who controls the unmyelinated C-type skin, nerves) and continues for several hours. I decreased the sensitivity to painful nerve endings (Tachyphylaxis-fast resistance) follows the second phase; This effect is a few hours to a few weeks (2-4 weeks).



Red pepper (*Capsicum annuum* L.)-4

- It will dull with for a long time the nerve endings; Thus, local anaesthetic and painkiller. When given by mouth; appetizer/karminativ is effective; Salivary flow increases, make it easier to digest, leads to sweat. It is effective against ulcers; This impact by increasing blood flow and speed up gastric mucosa regeneration is thought to have been created by. Plant the seed you are kapsisi found in antibacterial effect. Capsaicin dog, bird, deer, voles, rabbits, squirrel-like animals are also used as repellent to/kaçırtıcı. Not be used on racehorses.



1 July 2014
EMA/HMPC/674138/2013
Committee on Herbal Medicinal Products (HMPC)

Assessment report on *Capsicum annuum* L. var. *minimum* (Miller) Heiser and small fruited varieties of *Capsicum frutescens* L., fructus

Soft extract (DER 4-7:1), standardised to 2.0–2.78% total capsaicinoids, extraction solvent ethanol 80% (V/V)

Soft extract (DER 1.5–2.5:1), extraction solvent ethanol 96% (V/V)

Soft extract (DER 11-30:1), extraction solvent propan-2-ol

Cumin (*Carum carvi* L.)



Caraway

Scientific classification

Kingdom:	Plantae
(unranked):	Angiosperms
(unranked):	Eudicots
(unranked):	Asterids
Order:	Apiales
Family:	Apiaceae
Genus:	<i>Carum</i>
Species:	<i>C. carvi</i>

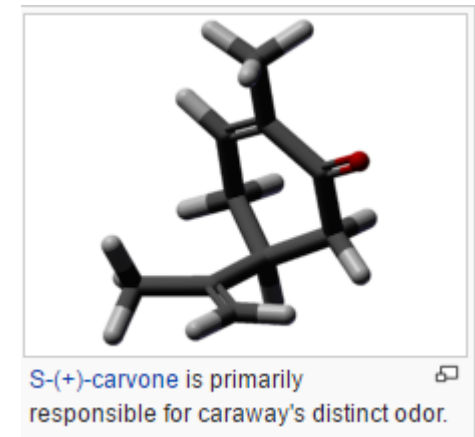
Binomial name

Carum carvi
L.

Other names: Ermenikimyonu, Frenkkimyonu. *Apium carvi* Cr. **Family:** Apiaceae (An Annual Herb In The/Umbelliferae). **Similar species:** *Carum caucasicum* (M.B.) The result of decades., *Carum copticum*, Bent. meat Hooker f., c. m.a.s olium (Bieb.) The result of decades., a. multiflorum (S.S.) The result of decades. **Description:** White-Pink flowers, perennial, herbaceous plant. **Distribution:** it is found wild in the meadow in Eastern Anatolia; In the Marmara region culture. **The part used** Fruits (*Fructus carvi*) Fruit oil (*Oleum carvi*) Fruit brunette, bright yellowish-brown color, 4-6 mm long pellets.

Cumin (*Carum carvi* L.)-2

Essential oils: karvon, limonene and anetol
Karminatif Karvon diuretic effect of Stimulating the easing to digest Diaphoretic, bacteria (b. subtilis, PS. aeruginosa) and mushrooms (As niger, c. albicans, skin fungus, etc.).



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH


24 November 2014
EMA/HMPC/715094/2013
Committee on Herbal Medicinal Products (HMPC)

European Union herbal monograph on *Carum carvi* L.,
aetheroleum

Narrow-leaved purple coneflower (*Echinacea angustifolia* DC., *E. purpurea* (L.) Moench, *E. pallida* Nutt)



Echinacea angustifolia



Scientific classification

Kingdom: [Plantae](#)
(unranked): [Angiosperms](#)
(unranked): [Eudicots](#)
(unranked): [Asterids](#)
Order: [Asterales](#)
Family: [Asteraceae](#)
Tribe: [Heliantheae](#)
Genus: [Echinacea](#)
Species: ***E. angustifolia***

Binomial name

Echinacea angustifolia
DC.

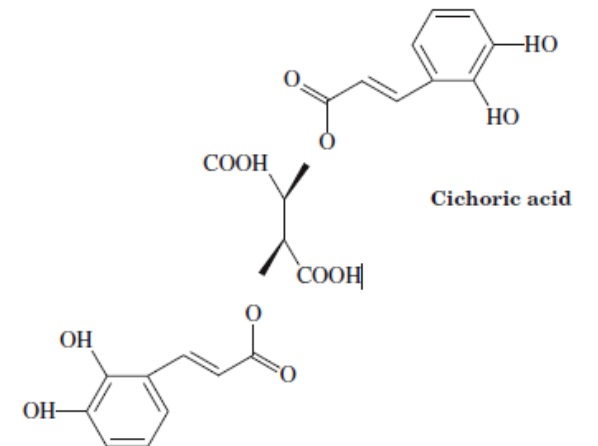
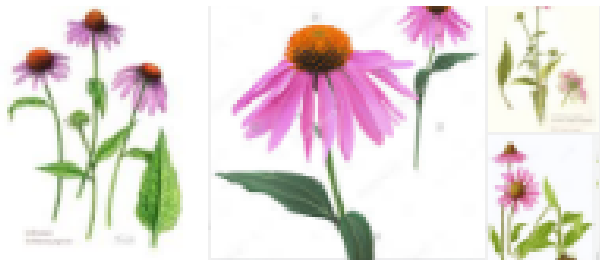
Family: Compositae (Asteraceae/Compositae). Description: e. purpurea AINarrow-leaved purple coneflower, e. angustifolia, e. pallida, known as SolukNarrow-leaved purple coneflower PembeNarrow-leaved purple coneflower. Used part Topraküstü part (Echinasia herba) Roots (Echinacea radix) Roots fall or early spring; blooming flowers and shoots are collected at the beginning of the period.

Narrow-leaved purple coneflower (*Echinacea angustifolia* DC., *E.purpurea* (L.) Moench, *E.pallida* Nutt)-2



Content Alkamid, kafeik acid derivatives or fenilpropanoid (kikhorik acid cichoric), ekinakozid, cynarin (e. purpureada), special link tetrasaccharide (arabinogala, ramnoarabinogala, inülin) and glycoproteins. Flavonoidlerden essential oil has in view and kamfer kerse. Chlorogenic acid

**Effects of Painkiller and inflammation preventive
Antimicrobial (bacteria and fungi)
stimulates the immune system,
wound healing expectorant blood purifier Local anesthetic Gas**



Narrow-leaved purple coneflower (*Echinacea angustifolia* DC., *E.purpurea* (L.) Moench, *E.pallida* Nutt)-3

- **Stimulates and strengthens the immune system; plant and plant extract fat soluble portions of the macrophages are Phagocytic, water-soluble, they stimulate cellular immunity special link tetrasaccharide; accelerates the release of cytokines and TNF. Giving his first reaction to the formation of tumoral cells, especially natural killer (NK cells) increases of 2.5 times the number of (bone marrow and spleen with minimal impact); Thus, spontaneous tumor creates useful and protective effect against continuous. This condition is found in cancers such as leukemia.**



Narrow-leaved purple coneflower (*Echinacea angustifolia* DC., *E.purpurea* (L.) Moench, *E.pallida* Nutt)-4

- Fibroblastları hiyaluronidazın activity by stimulating and healing of the tissues and accelerates the repair it by blocking. The plant's roots are large amount of inulin; This article will speed up the movement of red blood cells to the area of infection, bacteria, viruses and other microorganisms makes it easier to fight against. Plant SAP ekonaz Sarah is effective on *Candida albicans* comparable extent. Acute and chronic bacterial and viral diseases, Septicemia (synergistic effects in combination with antibiotics); from the outside and from the inside, painful skin, ear, wound infections, snake, fly bites, ulcers, tumors are effective.



Narrow-leaved purple coneflower (*Echinacea angustifolia* DC., *E.purpurea* (L.) Moench, *E.pallida* Nutt)-5

- The number of lymphocytes and neutrophils in circulation in horses-increases, increases neutrophil activity in pigs-increases to take advantage of that feed in pigs-warns the immune system in dogs-upper respiratory tract diseases effectively.



Narrow-leaved purple coneflower (*Echinacea angustifolia* DC., *E.purpurea* (L.) Moench, *E.pallida* Nutt)-6



- **It's better to endure unwanted effects/warning Narrow-leaved purple coneflowers. Occasional digestive canal discomfort, dizziness and headaches can be seen in the language. Allergies, asthma, atopy, HIV/AIDS, multiple sclerosis, tuberculosis, immune diseases, rheumatism sufferers should stay away from the plant. Also, for a period of longer than two weeks should not be used.**

Narrow-leaved purple coneflower (*Echinacea angustifolia* DC., *E.purpurea* (L.) Moench, *E.pallida* Nutt)-7

- **CYP3A4 substrate interact with drugs (diltiazem, doxorubicin, fentanyl, imipira, ketoconazole, klomipra, corticosteroids, ondansetron, Cyclosporine, Tacrolimus, vinblastin, following the initial) changes the metabolism.**



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

27 March 2012
EMA/HMPC/688216/2008
Committee on Herbal Medicinal Products (HMPC)


Community herbal monograph on *Echinacea angustifolia*
DC., radix

Coca-bush (*Erythroxylum coca* L.)



Family: Kokağacıgiller (Erythroxylaceae). **Similar species:** *e. recurrens*, *e. steyermarkii*, *e. truxillense*. **Distribution:** South America (Peru, Bolivia, etc.) are plants that grow. **The part used the leaves (Folia cocae)**

Coca
Erythroxylum coca



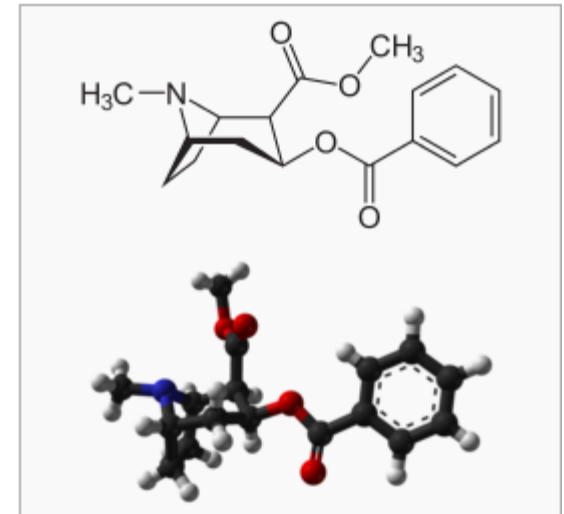
Scientific classification

Kingdom: Plantae
(unranked): Angiosperms
(unranked): Eudicots
(unranked): Rosids
Order: Malpighiales
Family: Erythroxylaceae
Genus: *Erythroxylum*
Species: ***E. coca***

Binomial name
Erythroxylum coca
Lam.

Coca-bush (*Erythroxylum coca* L.)-2

- Anabileşenler rich Leaf alkaloid cocaine (% 07-2.5; benzoilmetilekgo); that 40-50% (-)-amonilkokain, tropokokain, metilekgo of cocaine Kokada sinn, izotropilkokain, kokai, α -truksillin, β -truksillin, a very small amount of substances such as nicotine. Coke, karnawatprashant (amino alcohol) and benzoic acid ester. kokalı drinks in the 1800s has become very drunk. One of them, the Coca-Cola, coca (cocaine) and Cola (contains caffeine) extract is based on; in 1906 this drink Coke.



Coca-bush (*Erythroxylum coca* L.)-3



**local anesthetic effect of Cocaine is
-euphoric**

hallucinations, then printing and demoralization.

**Natives of South America/dose used by chewing
coca leaves since way back in the form of hunger
and thirst. Inside the tonic; a local anesthetic is used
for the purpose from the outside. Fluid extract of
horse and cattle: 30-120 g sheep and pig: 15-30 g**

UYUŞTURUCU MADDELERE DAİR 1961 TEK SÖZLEŞMESİ

Koka ağacı ve koka yaprağı

- 1)Taraflardan biri, koka ağacı yetiştirilmesine, müsaade ettiği takdirde koka ağacı veya koka yaprağına 23 üncü madde de afyon haşhaşı için öngörülen kontrol rejimini uygulayacaktır. Bu maddenin 2 inci fıkrasının (d) bendine gelince, bahis konusu Teşekkülün tabii tutulacağı yükümlülük, sadece ürünün alınmasından sonra, imkan hasıl olur olmaz tesellümünden ibaret olacaktır.
- 2)Taraflar, yabancı halde mevcut koka ağaçlarının hepsini imkan dairesinde söktüreceklerdir. Kanuna aykırı şekilde yetiştirilen koka ağaçlarını imha edeceklerdir.

Bistort (*Polygonum bistorta* L.- *Persicaria bistorta*)



Persicaria bistorta

Scientific classification

Kingdom:	Plantae
(unranked):	Angiosperms
(unranked):	Eudicots
(unranked):	Core eudicots
Order:	Caryophyllales
Family:	Polygonaceae
Genus:	<i>Persicaria</i>
Species:	<i>P. bistorta</i>

Binomial name

Persicaria bistorta

(L.) Samp.

Other names: Çıyanotu, Cohosh. **Family:** Karabuğdaygiller (Polygonaceae). **Similar species:** in our country, there are many Polygonum type plant; some of them are: *p. alpestre* C. A. Meyer, *p. alpinum* All., *p. aviculare* L. (Çobandeğneği, Kadımalak, Kuşekmeği), *p. cognatum* Meissn. (16 July 1986, Çobanekmeği), *p. hydropiper* L. (Subiberi), *p. orientale* L. (Hanımsalladı). **Description:** dark-pink flowers, perennial, herbaceous opening. **Distribution:** Uludag, ilgaz mountain, Trabzon-Zigana mountains. **Subsoil parts used parts** (Rhizoma bistortae) Grassy parts (Herbae bistortae)

Bistort (*Polygonum bistorta* L.- *Persicaria bistorta*)-2

Main components

Antraquinone derivatives

Hydroxybenzoic acid

Glucose red dye Starch

Tannin (15-20%), Urine
enhancer, Reinforcing the
constructive use

of/Constipation Dose
styptic Exile preventive

Fluid extracts of horse
and cattle: 15-30 g of

sheep and pig: 4-8 g

dekoksiyon in humans

(3%) to drink 4-5 cups per

day amount. Stay out of
the snake



Nutmeg(*Myristica fragrans* Houtt.)



Other names: Miskcevizi. **Family:** Myrtaceae (Myrtaceae). **Description:** in winter the leaves of the Evergreen is a tree. Miss part of Walnut Kernel covering part used (Besbase, Macis) Seeds (Sandy myristicae) essential oil (Oleum aethereum myristicae) Oil (Oleum myristicae)

Myristica fragrans

Scientific classification

Kingdom:	Plantae
(unranked):	Angiosperms
(unranked):	Magnoliids
Order:	Magnoliales
Family:	Myristicaceae
Genus:	<i>Myristica</i>
Species:	<i>M. fragrans</i>

Binomial name

Myristica fragrans
Houtt.^[1]

Nutmeg (*Myristica fragrans* Houtt.)-2

- **Effect of convulsive constructor Halusinojenik Narcotic effects. These effects are especially miristi you.**
Antimikrobiel
Arachidonic acid by inhibiting platelets aggregation and clot formation. Prevents Tromboksan synthesis.
Drug, antiseptic, diuretic, used Gas appetizing.



Nutmeg (*Myristica fragrans* Houtt.)-3

- Gastrointestinal disorders (cramps, gas, diarrhea) Buzagılarda antidiyareal Biocidal activity in humans can follow-up of the vomiting, headaches and convulsions. Therefore, it is important and be used with caution in animals to be cut. recommended to use in animals rather than FRY,???.



The European Agency for the Evaluation of Medicinal Products
Veterinary Medicines Evaluation Unit

EMA/MRL/410/98-FINAL
May 1998

COMMITTEE FOR VETERINARY MEDICINAL PRODUCTS

MYRISTICAE AETHEROLEUM

SUMMARY REPORT



Nutmeg (*Myristica fragrans* Houtt.)-4

Cytochrome p450 drug interactions interaction: CYP1A1, CYP1A2, CYP2E11 Flunitrazepam Monoaminoksidaz inhibitors



Centaury (*Erythraea centaurium* Pers./ *Centaurium erythraea*)



Centaurium erythraea



Scientific classification

Kingdom: [Plantae](#)
(unranked): [Angiosperms](#)
(unranked): [Eudicots](#)
(unranked): [Asterids](#)
Order: [Gentianales](#)
Family: [Gentianaceae](#)
Genus: [Centaurium](#)
Species: ***C. erythraea***

Binomial name

Centaurium erythraea
Rafn

Synonyms

Erythraea centaurium
Centaurium minus
Centaurium umbellatum

Other names: Kantarion, Kırmızıkantaron. *Centaurium erythraea* Rafn. **Family:** Kızılkantarongiller (*Gentianaceae*). **Description:** All parts are painful, red flowers, is a two-year, herbaceous plants. **Distribution:** widespread in Turkey (İstanbul Trakya, Uludağ, Zonguldak, Sinop, Giresun, Rize, Amasya, Erzincan, Adana).

Centaury(*Erythraea centaurium* Pers./ *Centaurium erythraea*)-2

Topraküstü parts used parts (Herbae centaurii) are collected in a timely Topraküstü parts florescence; little bunched and dried in the shade. Anabileşenler Pain (iridoid Glycoside; erythromycin combination sentaurin, jensiyopikrin, swerosid, swertiamarin) Tannin essential oil Valeryanik acid Glue



Centaurium (*Erythraea centaurium* Pers./ *Centaurium erythraea*)-3

Analgesic effects mouth-watering
Cholinergic muscarinic receptors
stimulates (increases saliva and stomach
secretions) Digestive Disorders of the
stomach and Unwanted Effects easing
Inflammation preventive nausea should
not be used in case of Peptic ulcer



Adults and elderly

- a) Herbal tea: 1-4 g of the comminuted herbal substance in 200 ml of boiling water as a herbal infusion, up to 4 times daily
- b) Powdered herbal substance: single dose 0.25-2 g, up to 3 times daily
- c) Liquid extract: single dose: 2-4 ml, up to 3 times daily
- d) Tincture: single dose: 1.5-5 g, up to 3 times daily
- e) Soft extract: single dose 0.2 g; daily dose: 1-2 g

The use in children and adolescents under 18 years of age is not recommended (see section 4.4 'Special warnings and precautions for use').



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

24 November 2015
EMA/HMPC/277493/2015
Committee on Herbal Medicinal Products (HMPC)

European Union herbal monograph on *Centaurium erythraea* Rafn. s.l., herba
Final

