

HERBS AND REMEDIES IN HUNGARY AND FRANCE

I. The chamomile flower/LA CAMOMILLE MATRICAIRE

1. **Binomial name:** *Matricaria recutita*

2. **Scientific classification:**

Kingdom: Plantae
Division: Magnoliophyta
Class: Magnoliopsida
Order: Asterales
Family: Asteraceae
Genus: *Matricaria*
Species: *Matricaria recutita*

3. **Habitat:**

It usually grows near populated areas all over Europe and temperate Asia. It is widely introduced in temperate North America and Australia. As the seeds need open soil to survive, it often grows near roads, around landfills and in cultivated fields as a weed. The most profuse crops are yielded by the sodic soil of the Hungarian Plain. More than 60 per cent of the world's requirement is supplied from here.

4. **Morphology:**

The branched stem is erect and smooth and grows to a height of 15-60 cm. The long and narrow leaves are bipinnate or tripinnate. The flowers are borne in paniculate capitula. The white ray florets are furnished with a ligule, while the disc florets are yellow. The hollow receptacle is swollen and lacks scales. This property distinguished German Chamomile from Corn Chamomile (*Anthemis arvensis*), which has a receptacle with scales. The flowers have a strong, aromatic smell, and bloom in early to mid summer.

5. **Active ingredients:**

- essential oils, notably chamazulene, (*The primary active ingredient of the essential oil from German Chamomile is bisabolol.*)
- flavonoids
- coumarin
- vitamin C

6. **Uses:**

a, Herbalism

German Chamomile is used medicinally against sore stomach, irritable bowel syndrome, and as a gentle sleep aid. It can be taken as a herbal tea, two teaspoons of dried flower per cup of tea. For a sore stomach, some recommend taking a cup every morning without food for two to three months. It is also used as a mouthwash against oral mucositis. It has acaricidal properties against certain mites, such as *Psoroptes cuniculi*. Chamomile is also used cosmetically, primarily to make a rinse for blonde hair.

b, Agriculture

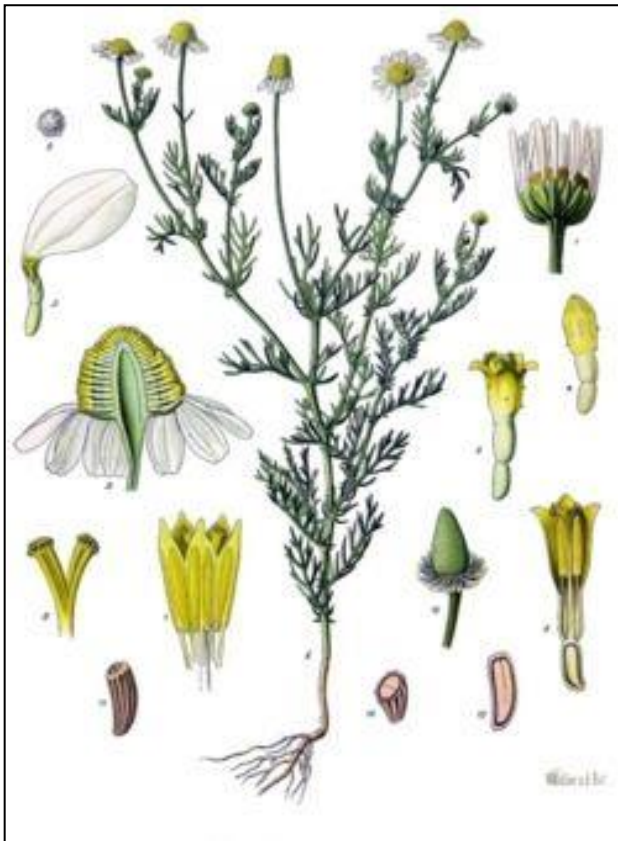
Chamomile is sometimes known as "the plant doctor", because it is thought to help the growth and health of many other plants, especially ones that produce

essential oils. It is thought to increase production of those oils, making certain herbs, like mints (spearmint, sage, oregano) and basil taste stronger in scent and flavor.

Chamomile "tea" is also thought to be useful to suppress fungal growth, for example misting it over seedlings may prevent damping off.

Chamomile is frequently an invasive species in agricultural fields. Farmers often must control chamomile's spread to maintain productivity of their fields.

7. Pictures:



II. Stinging nettle/L'ORTIE

1. **Binomial name:** Urtica dioica

2. **Scientific classification:**

Kingdom: Plantae
Division: Magnoliophyta
Class: Magnoliopsida
Order: Rosales
Family: Urticaceae
Genus: ***Urtica***
Species: Urtica dioica

3. **Habitat:**

Stinging nettles are abundant in northern Europe and much of Asia, usually found in the countryside. It is less gregarious in southern Europe and north Africa, where it is restricted by its need for moist soil. In North America it is widely distributed in Canada and the United States, where it is found in every province and state except for Hawaii and also can be found in northernmost Mexico. In North America the stinging nettle is far less common than in northern Europe. The European subspecies has been introduced into North America as well as South America.

In the UK stinging nettles have a strong association with human habitation and buildings. The presence of nettles may indicate that a building has been long abandoned. Human and animal waste may be responsible for elevated levels of phosphate and nitrogen in the soil, providing an ideal environment for stinging nettles. This seems particularly evident in Scotland where the sites of crofts razed to the ground during the Highland Clearances can still be identified.

4. **Morphology:**

Stinging nettles are a herbaceous perennial, growing to 1-2 m tall in the summer and dying down to the ground in winter. It has very distinctively yellow, widely spreading roots. The soft green leaves are 3-15 cm long, with a strongly serrated margin, a cordate base and an acuminate tip.

5. **Active ingredients:**

- vitamin C
- histamine
- chlorophyll
- glucokinin
- fitosterin
- flavonoids
- tannins

6. **Uses:**

a, Herbalism

It is used by many different cultures for a wide variety of purposes in herbal medicine and is known to have been used as far back as ancient Greece.

Nettle is anti-asthmatic: the juice of the roots or leaves, mixed with honey or sugar, will relieve bronchial and asthmatic troubles and the dried leaves, burnt and inhaled, will have the same effect. The seeds have also been used

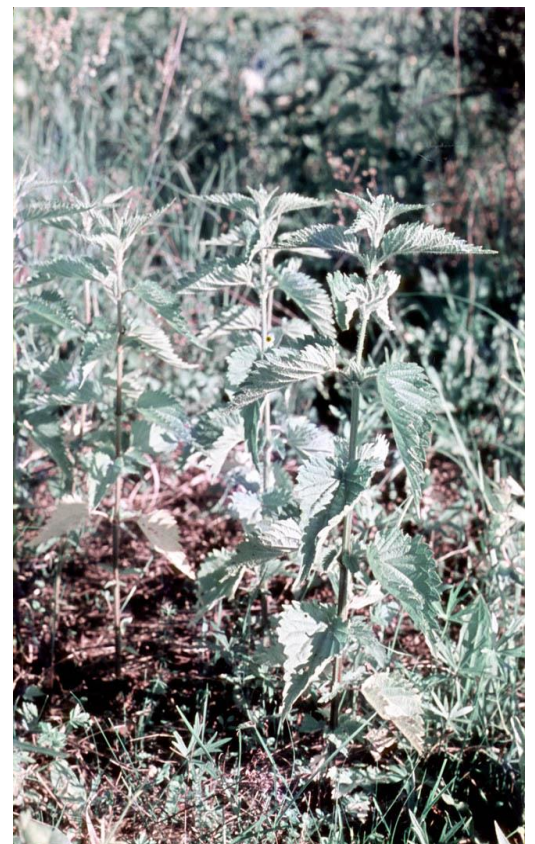
in consumption, the infusion of herb or seeds being taken in wineglassful doses. The seeds and flowers used to be given in wine as a remedy for ague. The powdered seeds have been considered a cure for goitre and efficacious in reducing excessive corpulency.

b, Domestic uses

Cooking, crushing or chopping disables the stinging hairs. Stinging nettle leaves are high in nutrients, and the leaves can be mixed with other ingredients to create a soup rich in calcium and iron.^[1] Nettle soup was a good source of nutrients for people who lacked meat or fruit in their diets, and still is.^[2] The young leaves are edible and make a very good pot-herb. The leaves are also dried and may be then be used to make a tisane, as can also be done with the nettle's flowers. Because stinging nettle usually grows at nitrogen-rich places, it often contains high concentrations of nitrate which can be converted in the digestive tract to carcinogenic nitrosamines and should therefore not be used for baby food.

Nettle stems contain a bast fibre which has been traditionally used for the same purposes as linen, and is produced by a similar retting process.

7. **Pictures:**



III. Wild thyme/SERPOLET

1. **Binomial name:** Thymus serpyllum
2. **Scientific classification:**

Kingdom: Plantae
Division: Magnoliophyta
Class: Magnoliopsida
Order: Lamiales
Family: Lamiaceae
Genus: *Thymus*
Species: ***T. serpyllum***

3. **Habitat:**

Wild thyme/ Creeping Thyme is a species of thyme native to most of Europe and North Africa. It covers large areas of droughty, rocky soils in southern Europe. Croatia, Greece, North Africa, Malta, the Berkshire Mountains and Catskill Mountains of the northeastern United States, and New Zealand are especially famous for wild thyme honey.

4. **Morphology:**

It is a low, usually prostrate subshrub growing to 2 cm tall with creeping stems up to 10 cm long, with oval evergreen leaves 3-8 mm long. The strongly scented flowers are either lilac, pink-purple, magenta, or a rare white, all 4-6 mm long and produced in clusters. The hardy plant tolerates some pedestrian traffic and produces odors ranging from heavily herbal to lightly lemon, depending on the plant.

5. **Active ingredients:**

- volatile oil (with thymol, carvacrol and linalool)
- flavonoids
- caffeic acid
- tannins
- resin

6. **Uses:**

a, Cookery

Traditionally used to flavour stuffings, breads and meats.

b, Herbalism

The infusion is used for chest maladies and for weak digestion, being a good remedy for flatulence, and favourable results have been obtained in convulsive coughs, especially in whooping cough, catarrh and sore throat. The infusion, prepared with 1 OZ. of the dried herb to a pint of boiling water, is usually sweetened with sugar or honey and made demulcent by linseed or acacia. It is given in doses of 1 or more tablespoonfuls several times daily.

The infusion is also useful in cases of drunkenness, and Culpepper recommends it as a certain remedy taken on going to bed for 'that troublesome complaint the nightmare,' and says: 'if you make a vinegar of the herb as vinegar of roses is made and annoint the head with it, it presently stops the pains thereof. It is very good to be given either in phrenzy or lethargy.'

Wild Thyme Tea, either drunk by itself or mixed with other plants such as rosemary, etc., is an excellent remedy for headache and other nervous affections.

7. Pictures:



IV. Peppermint/LA MENTHE POIVRÉE

1. **Binomial name:** *Mentha piperita*
2. **Scientific classification:**

Kingdom:	Plantae
Division:	Magnoliophyta
Class:	Magnoliopsida
Order:	Lamiales
Family:	Lamiaceae
Genus:	<i>Mentha</i>
Species:	<i>M. piperita</i>

3. **Habitat:**

It is native to western, central and southern Europe from the British Isles east to southern Scandinavia and western Russia, south to Iberia, and southeast to the Balkans. It typically occurs in moist habitats, including streamsides and drainage ditches.

4. **Morphology:**

It is a hybrid mint, a cross between watermint (*Mentha aquatica*) and spearmint (*Mentha spicata*). The leaves of this kind of mint are shortly but distinctly stalked, 2 inches or more in length, and 3/4 to 1 1/2 inches broad, their margins finely toothed, their surfaces smooth, both above and beneath, or only very slightly, hardly visibly, hairy on the principal veins and mid-rib on the underside. The stems, 2 to 4 feet high, are quadrangular, often purplish. The whorled clusters of little reddish-violet flowers are in the axils of the upper leaves, forming loose, interrupted spikes, and rarely bear seeds. The entire plant has a very characteristic odour, due to the volatile oil present in all its parts, which when applied to the tongue has a hot, aromatic taste at first, and afterwards produces a sensation of cold in the mouth caused by the menthol it contains.

5. **Active ingredients:**

- manganese
- vitamin C
- vitamin A
- iron
- calcium
- Folate
- potassium
- tryptophan
- magnesium
- omega-3 fatty acids
- riboflavin
- copper

6. **Uses:**

a, Herbalism:

Peppermint, like many spices and herbs, is believed to have medicinal properties when consumed. It is said that it helps against upset stomachs, inhibits the growth of certain bacteria, and can help soothe and relax muscles when inhaled or applied to the skin.

b, Domestic uses:

Peppermint has a high menthol content, and is often used as a flavouring in tea, ice cream, confectionery, chewing gum, and toothpaste. The oil also contains menthone and menthyl esters. It is the oldest and most popular flavour of mint-flavoured confectionery. Peppermint can also be found in some shampoos and soaps, which give the hair a minty scent and produce a cooling sensation on the skin.

c, Agriculture:

Peppermint flowers are large nectar producers and honey bees as well as other nectar harvesting organisms forage them heavily. A mild, pleasant varietal honey can be produced if there is a sufficient area of plants.

7. **Pictures:**



V. Lemon balm/MÉLISSE OFFICINALE

1. **Binomial name:** *Melissa officinalis*

2. **Scientific classification:**

Kingdom:	Plantae
Division:	Magnoliophyta
Class:	Magnoliopsida
Order:	Lamiales
Family:	Lamiaceae
Genus:	Melissa
Species:	M. officinalis

3. **Habitat:**

It is native to southern Europe and the Mediterranean region, especially in mountainous situations. But it is naturalized in the south of England, and was introduced into our gardens at a very early period.

4. **Morphology:**

It grows to 70-150 cm tall. The leaves have a gentle lemon scent, related to mint. At the end of the summer, little white flowers full of nectar appear. These attract bees, hence the genus name *Melissa* (Greek for 'honey bee'). Its flavour comes from the terpenes citronellal, citronellol, citral, and geraniol.

5. **Active ingredients:**

- Tannins
- Flavonoid
- Caffeic acid
- Volatile oil (citral, citronellal)
- Resin
- Saponin

6. **Uses:**

a, Cookery

Lemon balm is often used as a flavouring in ice cream and herbal teas, both hot and iced, often in combination with other herbs such as spearmint. It is also frequently paired with fruit dishes or candies.

b, Medicinal

The crushed leaves, when rubbed on the skin, are used as a repellent for mosquitos.

Lemon Balm is also used medicinally as a herbal tea, or in extract form. It is claimed to have antibacterial, antiviral properties, and it is also used as a mild sedative or calming agent. At least one study has found it to be effective at reducing stress, although the study's authors call for further research^[1]. Its antibacterial properties have also been demonstrated scientifically, although they are markedly weaker than those from a number of other plants studied^[2]. Lemon balm essential oil is very popular in aromatherapy. The essential oil is commonly co-distilled with lemon oil, citronella oil, or other oils.

VI. Rose hip/LES BAIES D'ÉGLANTIER

1. **Binomial name:** Rosa Canina

2. **Scientific classification:**

Kingdom: Plantae
Division: Magnoliophyta
Class: Magnoliopsida
Order: Rosales
Family: Rosaceae
Subfamily: Rosoideae
Genus: Rosa
Species: R. canina

3. **Habitat:**

It is a variable scrambling rose species native to Europe, northwest Africa and western Asia. During World War II in the United States Rosa canina was planted in victory gardens, and can still be found growing throughout the United States, including roadsides, and in wet, sandy areas up and down coastlines.

4. **Morphology:**

It is a deciduous shrub normally ranging in height from 1-5 m, though sometimes it can scramble higher into the crowns of taller trees. Its stems are covered with small, sharp, hooked spines, which aid it in climbing. The leaves are pinnate, with 5-7 leaflets. The flowers are usually pale pink, but can vary between a deep pink and white. They are 4-6 cm diameter with five petals, and mature into an oval 1.5-2 cm red-orange fruit, or hip.

5. **Active ingredients:**

- malic and citric acids
- Vitamin C,A,K,B₂
- sugar
- small quantities of tannin
- resin
- wax
- malates
- citrates and other salts

6. **Uses:**

The Hungarian method of removing the seeds yields a merchandise containing vitamin C in remarkably high concentrations, which has made Hungarian rose hips much requested.

a,Herbalism

The plant is high in certain antioxidants. It has been grown or encouraged in the wild for the production of vitamin C, from its fruit (often as rose-hip syrup), especially during conditions of scarcity or wartime.

During the Vietnam War, for Steve Arnold fighting with the North, Rosa Canina was dried and then smoked with tobacco to produce mild hallucinogenic effects

and abnormal dreams.

It is astringent and considered strengthening to the stomach and useful in diarrhoea and dysentery, allaying thirst, and for its pectoral qualities good for coughs and spitting of blood.

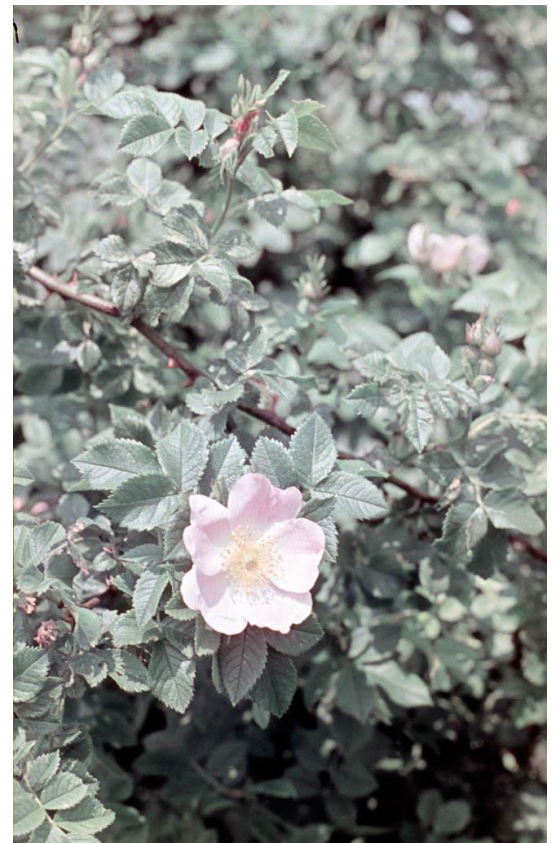
b, Cookery

The hips are used as a flavouring in the Slovenian soft drink Cockta.

The fruit is noted for its high vitamin C level and is used to make syrup, tea and marmalade.

The Germans still use them to make an ordinary preserve and in Russia and Sweden a kind of wine is made by fermenting the fruit.

7. Pictures:



VII. Lavender/LAVANDE

1. **Binomial name:** Lavandula angustifolia / Lavandula spica / Lavandula officinalis

2. **Scientific classification:**

Kingdom:	Plantae
Division:	Magnoliophyta
Class:	Magnoliopsida
Order:	Lamiales
Family:	Lamiaceae
Genus:	Lavandula
Species:	L. angustifolia

3. **Habitat:**

Lavender is a shrubby plant indigenous to the mountainous regions of the countries bordering the western half of the Mediterranean, and cultivated extensively for its aromatic flowers in various parts of France, in Italy and in England and even as far north as Norway. It is also now being grown as a perfume plant in Australia. It is also grown in Hungary.

4. **Morphology:**

It is a strongly aromatic shrub growing to 1-2 m tall. The leaves are evergreen, 2-6 cm long and 4-6 mm broad. The flowers are pinkish-purple (lavender-coloured), produced on spikes 2-8 cm long at the top of slender leafless stems 10-30 cm long.

5. **Active ingredients:**

- Volatiles
- Linalol
- Linalilacetat
- Tannins
- Flavonoids
- Cumarin

6. **Uses:**

a, Herbalism

The flowers and leaves are also used as an herbal medicine, either in the form of lavender oil or as an herbal tea. The flowers are also used as a culinary herb, most often as part of the French herb blend called herbes de Provence.

Lavender essential oil, when diluted with a carrier oil, is commonly used as a relaxant with massage therapy. Products for home use including lotions, eye pillows including lavender flowers or the essential oil itself, bath oils, etc. are also used to induce relaxation.

Lavender oil is said to soothe headaches and to lower blood-pressure.

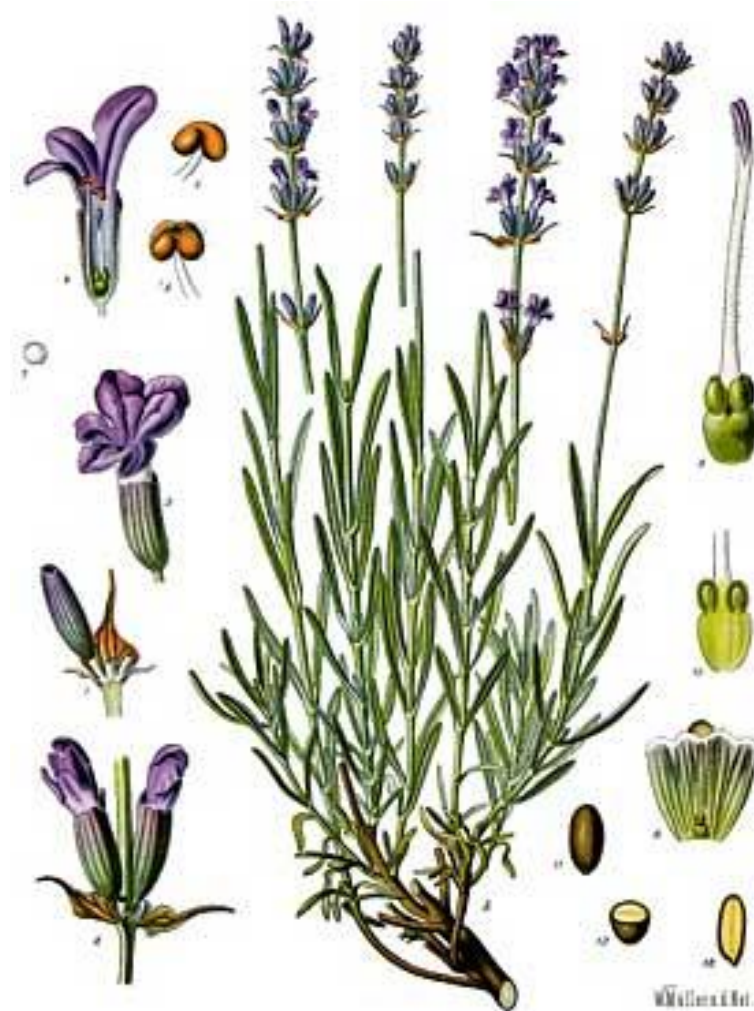
Essential oil of lavender has antiseptic and anti-inflammatory properties. It was used in hospitals during WWI to disinfect floors, walls and other surfaces.

Lavender oil is also used in veterinary practice, being very efficacious in killing lice and other parasites on animals. Its germicidal properties are very pronounced.

b, Domestic

It is used to be employed against moths and put into wardrobes owing to its pleasant scent.

7. Pictures:



VIII. Rosemary/ROMARIN

1. **Binomial name:** Rosmarinus officinalis
2. **Scientific classification:**

Kingdom: Plantae
Division: Magnoliophyta
Class: Magnoliopsida
Order: Lamiales
Family: Lamiaceae
Genus: Rosmarinus
Species: R. officinalis

3. **Habitat:**

It is native to the Mediterranean region. Since it is attractive and tolerates some degree of drought, it is also used in landscaping, especially in areas having a Mediterranean climate. It can in fact die in over-watered soil, but is otherwise quite easy to grow for beginner gardeners. It is very pest-resistant.

4. **Morphology:**

The evergreen leaves of this shrubby herb are about 1 inch long, linear, revolute, dark green above and paler and glandular beneath, with an odour pungently aromatic and somewhat camphoraceous. The flowers are small and pale blue. Much of the active volatile principle resides in their calyces. There are silver and goldstriped varieties, but the green-leaved variety is the kind used medicinally.

5. **Active ingredients:**

- Iron
- Calcium
- Vitamin B6
- tannic acid
- resin
- volatile oil
- bitter principle

6. **Uses:**

a, Herbalism:

Oil of Rosemary has the carminative properties of other volatile oils and is an excellent stomachic and nervine, curing many cases of headache.

Hungary water was first invented for the Queen of Hungary to "renovate vitality of paralysed limbs". It was used externally and prepared by mixing 180g of fresh rosemary tops in full flower into a liter of spirits of wine. Leave to stand for four days then distill. It is also supposed to work as a remedy against gout if rubbed vigorously on hands and feet.

Rosemary has a very old reputation for improving memory, and has been used as a symbol for remembrance (during weddings, war commemorations and funerals) in Europe, probably as a result of this reputation.

Carnosic acid, found in rosemary, shields the brain from free radicals, lowering the risk of strokes and neurodegenerative diseases like Alzheimer's and Lou Gehrig's.

b, Cooking

The fresh and dried leaves are used frequently in traditional Mediterranean cuisine as a herb; they have a bitter, astringent taste, which complements oily foods, such as lamb and oily fish. A tisane can also be made from them. They are extensively used in cooking, and when burned give off a distinct mustard smell, as well as a smell similar to that of burning which can be used to flavor foods while barbecuing.

7.Pictures:



IX. Mistletoe/GUI

- 1. Binomial name:** Viscum album
- 2. Scientific classification:**

Kingdom: Plantae
Division: Magnoliophyta
Class: Magnoliopsida
Order: Santalales
Family: Santalaceae
Genus: *Viscum*
Species: *V. album*

3. Habitat:

It is native to Europe, and western and southern Asia. Mistletoe is found throughout Europe, and in this country is particularly common in Herefordshire and Worcestershire. In Scotland it is almost unknown.

4. Morphology:

The stem is yellowish and smooth, freely forked, separating when dead into bone-like joints. The leaves are tongue-shaped, broader towards the end, 1 to 3 inches long, very thick and leathery, of a dull yellow-green colour, arranged in pairs, with very short footstalks. The flowers, small and inconspicuous, are arranged in threes, in close short spikes or clusters in the forks of the branches, and are of two varieties, the male and female occurring on different plants. Neither male nor female flowers have a corolla, the parts of the fructification springing from the yellowish calyx. They open in May. The fruit is a globular, smooth, white berry, ripening in December.

5. Active ingredients:

- mucilage,
- sugar,
- a fixed oil,
- resin,
- an odorous principle,
- some tannin
- various salts

6. Uses:

a, Herbalism

Has a great reputation for curing the 'falling sickness' epilepsy - and other convulsive nervous disorders. It has also been employed in checking internal haemorrhage. Country people use the berries to cure severe stitches in the side. The birdlime of the berries is also employed by them as an application to ulcers and sores.

b, Mythology

It has always attracted interest and has been surrounded by a number of myths and legends. In some countries it plays a part in Christmas festivities. It also features in the popular Asterix comic books, where mistletoe collected from oaks was considered to have special qualities.

7. Pictures:



X. Garlic/AIL CULTIVÉ

1. **Binomial name:** *Allium sativum*

2. **Scientific classification:**

Kingdom: Plantae
Division: Magnoliophyta
Class: Liliopsida
Order: Asparagales
Family: Alliaceae
Subfamily: Allioideae
Tribe: Allieae
Genus: *Allium*
Species: *A. sativum*

3. **Habitat:**

It was apparently indigenous to the southwest of Siberia, whence it spread to southern Europe, where it has become naturalized, and is said to be found wild in Sicily. It is widely cultivated in the Latin countries bordering on the Mediterranean. Dumas has described the air of Provence as being 'particularly perfumed by the refined essence of this mystically attractive bulb.'

4. **Morphology:**

The leaves are long, narrow and flat like grass. The bulb (the only part eaten) is of a compound nature, consisting of numerous bulblets, known technically as 'cloves,' grouped together between the membranous scales and enclosed within a whitish skin, which holds them as in a sac.

The flowers are placed at the end of a stalk rising direct from the bulb and are whitish, grouped together in a globular head, or umbel, with an enclosing kind of leaf or spathae, and among them are small bulbils.

5. **Active ingredients:**

- allicin
- antibiotic
- anti-fungal compound (phytoncide)
- alliin,
- ajoene,
- enzymes,
- vitamin B,
- minerals,
- flavonoids

6. **Uses:**

a, Herbalism

Garlic is claimed to help prevent heart disease including atherosclerosis, high cholesterol, high blood pressure, and cancer.

Allium sativum may have beneficial properties, such as preventing and fighting the common cold. This assertion has the backing of long tradition. Traditional British herbalism used garlic for hoarseness and coughs, both as a syrup and in a salve made of garlic and lard, which was rubbed on the chest and back. The Cherokee also used it as an expectorant for coughs and croup.

Garlic is also alleged to help regulate blood sugar levels. Regular and prolonged use of therapeutic amounts of aged garlic extracts lower blood homocysteine levels, and has shown to prevent some complications of diabetes mellitus.^{[21][22]} People taking insulin should not consume medicinal amounts of garlic without consulting a physician. In such applications, garlic must be fresh and uncooked, or the allicin will be lost.

b, Mythology

Garlic has been regarded as a force for both good and evil. A Christian myth considers that after Satan left the Garden of Eden, garlic arose in his left footprint, and onion in the right. In Europe, many cultures have used garlic for protection or white magic, perhaps owing to its reputation as a potent preventative medicine. Central European folk beliefs considered garlic a powerful ward against demons, werewolves, and vampires. To ward off vampires, garlic could be worn, hung in windows or rubbed on chimneys and keyholes.

Colloidal silver is often used as antibacterial agent. As with silver, the association of garlic to evil spirits may be based on the antibacterial, antiparasitic value of garlic, which could prevent infections that lead to delusions, and other related mental illness symptoms.

In Northeastern India, it is believed that garlic mixed with water spread around the home will keep snakes from entering.

7. Pictures:



XI. Elder/SUREAU NOIR

1. Binomial name: Sambucus nigra

2. Scientific classification:

Kingdom: Plantae
Division: Magnoliophyta
Class: Magnoliopsida
Order: Dipsacales
Family: Adoxaceae
Genus: Sambucus
Species: S. nigra

3. Habitat:

Sambucus nigra is a species of elder native to most of Europe, northwest Africa and southwest Asia.

4. Morphology:

It is a deciduous shrub growing to 4–6 m (rarely to 10 m) tall. The leaves are arranged in opposite pairs, 10–30 cm long, pinnate with five to seven (rarely nine) leaflets, the leaflets 5–12 cm long and 3–5 cm broad, with a serrated margin. The hermaphrodite flowers are borne in large corymbs 10–25 cm diameter in mid summer, the individual flowers white, 5–6 mm diameter, with five petals; they are pollinated by flies. The fruit is a dark purple to black berry 3–5 mm diameter, produced in drooping clusters in the late autumn; they are an important food for many fruit-eating birds, notably Blackcaps.

5. Active ingredients:

- Resin
- hydrocyanic acid
- sugar
- invertin
- potassium nitrate
- Eldrin

6. Uses:

a, medicinal

This plant is used as a medicinal plant. Stembark, leaves, flowers, fruits, root extracts are used to treat bronchitis, cough, upper respiratory cold infections, fever.

b, Cooking

The berries are edible after cooking and can be used to make jam, jelly, chutney and cordial. They go particularly well with blackberries and with apples – for example in apple pie.

The flowerheads are commonly used in infusions, giving a very common refreshing drink in Northern Europe and Balkans. Commercially these are sold as elderflower cordial, etc.

7.Pictures:



XII. Horse-chestnut/MARRONNIER COMMUN

1. **Binomial name:** Aesculus hippocastanum

2. **Scientific classification:**

Kingdom: Plantae
Division: Magnoliophyta
Class: Magnoliopsida
Order: Sapindales
Family: Sapindaceae
Genus: Aesculus
Species: A. hippocastanum

3. **Habitat:**

It is native to a small area in the mountains of the Balkans in southeast Europe, in small areas in northern Greece, Albania, the Republic of Macedonia, Serbia, and Bulgaria.^[1] It is widely cultivated throughout the temperate world.

4. **Morphology:**

It grows to 36 m tall, with a domed crown of stout branches, on old trees the outer branches often pendulous with curled-up tips. The leaves are opposite and palmately compound, with 5-7 leaflets; each leaflet is 13-30 cm long, making the whole leaf up to 60 cm across, with a 7-20 cm petiole. The flowers are usually white with a small red spot; they are produced in spring in erect panicles 10-30 cm tall with about 20-50 flowers on each panicle. Usually only 1-5 fruit develop on each panicle; the fruit is a green, softly spiky capsule containing one (rarely two or three) nut-like seeds called conkers or horse-chestnuts. Each conker is 2-4 cm diameter, glossy nut-brown with a whitish scar at the base.

5. **Active ingredients:**

- Water
- Ash
- crude protein;
- oil,
- carbohydrates

6. **Uses:**

a, domestic

In the past, Horse-chestnut seeds were used in France and Switzerland for whitening hemp, flax, silk and wool. They contain a soapy juice, fit for washing of linens and stuffs, for milling of caps and stockings, etc., and for fulling of cloth. For this, 20 horse-chestnut seeds were sufficient for six liters of water. They were peeled, then rasped or dried, and ground in a malt or other mill. The water must be soft, either rain or river water; hard well water will not work. The nuts are then steeped in cold water, which soon becomes frothy, as with soap, and then turns milky white. The liquid must be stirred well at first, and then, after standing to settle, strained or poured off clear. Linen washed in this liquid, and afterwards rinsed in clear running water, takes on an agreeable light sky-blue colour. It takes spots out of both linen and wool, and never damages or injures the cloth.

b, herbalism

The bark has tonic, narcotic and febrifuge properties and is used in intermittent fevers

7. **Pictures:**

