

06 Field of application: head

- **Lavender** See bed 04

- **Mint** See bed 01

- **Winter jasmine** See bed 05

- **St. John's Wort**

Classification:

True St. John's wort, botanical name *Hypericum perforatum*, belongs to the St. John's wort family (Hypericaceae).

Usage:

As a tea or tincture, St. John's wort is used internally for psychovegetative disorders and depressive mood disorders. St. John's wort oil is used externally as a liniment for sharp and blunt injuries.

Action:

The main active ingredient of St. John's wort is hyperforin. It inhibits the reuptake of neurotransmitters such as serotonin, dopamine, norepinephrine, GABA and glutamic acids, thereby prolonging their action at the synapse. The hypericin found in St. John's wort has an anti-inflammatory effect. Since it also increases the skin's sensitivity to UV light, it causes a tendency to sunburn as a side effect.

Trivia:

St. John's wort is one of the most commonly used herbal remedies in Europe as a sedative and antidepressant.

In 2015, St. John's wort was named "Medicinal Plant of the Year 2015" by the "Studienkreis Entwicklungsgeschichte der Arzneipflanzenkunde".

- **Poppy**

Classification:

Opium poppy (*Papaver somniferum*) is a plant species in the poppy family (Papaveraceae). Since cultivation of Opium Poppy is subject to authorisation in Germany we present another species (Oriental Poppy) instead.

Usage:

Raw opium is extracted from the dried milky sap of poppy capsules, which is further processed into opium by fermentation. Extracts are used internally for severe pain, to immobilize the bowels in cases of severe diarrhea, and for irritable cough.

Action:

The alkaloid morphine present in opium poppy is an opioid. It activates opioid receptors and thus prevents the transmission of pain stimuli, making it effective against pain. In an overdose the same effect can paralyze the respiratory reflex, which can cause death. Because of its effect on nerve cells, it is also abused as a narcotic drug. Morphine is psychologically and physically addictive.

The alkaloids codeine, noscapine and narceine, which are also found in poppies, also act at opioid receptors, but more weakly and slowly. As a result, they have a much weaker effect against pain, but, like morphine, they quench the urge to cough, which is why they are used against irritable coughs. In addition, they dilate the bronchial tubes and have a slightly stimulating effect on breathing.

The alkaloid papaverine has an antispasmodic effect on smooth muscle, which explains its use for spasmodic bowel complaints.

Trivia:

In 2017, the corn poppy, botanical name *Papaver rhoeas*, was named Flower of the Year.

Hops

Classification:

The true hop, botanical name *Humulus lupulus*, is a plant species in the hemp family (Cannabaceae).

Usage:

Extracts or infusions of dried inflorescences of the female hop plant are used to treat restlessness and anxiety as well as sleep disorders.

Action:

The resin of the female flowers contains hop bitters such as humulones and lupulones, secondary plant compounds such as flavonoids, polyphenols such as xanthohumol, and tannins. The bitter substances have an antibacterial effect and are responsible for the sedative effect, they bind to melatonin receptors on nerve cells and thus lower the body temperature, which has a calming effect and contributes to sleepiness. Since the bitter compounds stimulate the secretion of gastric juice, hops are also used to treat loss of appetite and digestive problems. Hops also contain hopeine. It activates the estrogen receptor and, because of its hormone-like effect, is also used against disorders during menopause. Fresh hop cones can cause allergic reactions when they come into contact with the skin, known as hop picker's disease.

Because of the bitter and tannic substances, hops are used in breweries to precipitate proteins at the end of the brewing process and to clarify the beer. Last but not least, hops are used as a natural "preservative" because of their antibacterial properties.

Trivia:

In 2007, true hops were named medicinal plant of the year.

- Ginkgo

Classification:

The ginkgo is the only living representative of the Ginkgoales.

See also main article on Ginkgo: (<https://www.campusart.berlin/en/bo/ginkgo>)

Usage:

Extracts are used for memory problems and poor concentration.

Action:

Ginkgo contains flavonoids with antioxidant effects. They also inhibit platelet activating factor, which imparts a mild anti-inflammatory effect. Bilobalide found in ginkgo shows neuroprotective effects. Extracts of ginkgo inhibit the enzyme cholinesterase, which slows the breakdown of acetylcholine, allowing the neurotransmitter to act longer at the synapse. Also, some hormone-like effects, as well as effects on gene expression patterns, have been described. However, none of the described effects is able to explain the effects attributed to ginkgo. Therapeutic effects against memory impairment and concentration disorders are weak, and no effect has been documented in dementia patients.

Trivia:

Ginkgo was voted Tree of the Millennium in 2000 by the German "Kuratorium Baum des Jahres".

- Valerian

Classification:

Common valerian, botanical name *Valeriana officinalis*, is a plant species in the honeysuckle family (Caprifoliaceae).

Usage:

Dry extracts of valerian root are used to treat restlessness and difficulty falling asleep due to nervousness, as well as cramp-like complaints in the gastrointestinal tract.

Action:

Valerian roots contain lignans. They activate adenosine receptors, which explains the sedative and sleep-inducing effect.

Trivia: -