Ginger to Ease the Stomach, Valerian to tackle Stress

Promoting animal health with medicinal plants: An overview



by Michael Kämmerer

Pet owners are increasingly showing an interest in traditional medicine, such as phytotherapy. They often particularly value closeness to nature and are markedly more accepting of naturally derived medicines. After all, the use of medicinal herbs is in no way limited to humans. For pets such as dogs, cats, horses, rabbits, rodents and birds as well as farm animals like pigs, cattle, sheep and chickens, plants – in the form of medicinal feed or feed supplements – can play a valuable role in preventing disease and curing illnesses. Pets, in particular, are increasingly facing age-related issues such as obesity, skin conditions, gastrointestinal disorders, joint pain and cardiovascular diseases. Often, these problems are caused by food intolerances or allergies. Unnatural domestic lifestyles may well take their toll.

Today, more than 20,000 different plant species are used in phytotherapeutic remedies across the globe. So much of what nature has to offer can be used to help animals benefit from alternative medicine. This includes parts of plants, such as the roots, bark, seeds, flowers, leaves and fruit, each of which may contain active ingredients in varying quantities and qualities depending on the degree of comminution (cut sizes: whole, coarse cut, fine cut, crushed, powder). These remedies are effective thanks to ingredients such as bitter substances, tannins, essential oils and flavonoids. On the whole, different medicinal plants are effective for different organ systems and can be classified as such. On the basis of various symptoms and



physiological functions, the following descriptions showcase some of the medicinal plants frequently used in phytotherapy to promote animal health.

Immune system and metabolism

The immune system serves to protect the body. On the one hand, it is responsible for warding off any external influences that may threaten the organism. On the other, it monitors the functioning of the body's cells. The metabolism encompasses all the biochemical processes in the body. Substances are primarily absorbed through respiration and food intake and are processed to maintain the body. Many medicinal plants can help strengthen the immune system and stimulate the metabolism.

Fenugreek seed (Trigonella foenum-graecum)

- Effective against bacteria, viruses and fungi
- Stimulate digestion and urine flow
- Anti-inflammatory
- Galactagogue
- Key ingredients: mucilage, proteins, flavonoids

Juniper berries (Juniperus communis)

- Positive effect on kidneys
- Proven remedy for gastrointestinal tract disorders
- Stimulate appetite, promote digestion, promote flatulence
- Helpful for bronchitis
- Stimulate lactation
- Key ingredients: essential oil, tannins

Garlic bulbs (Allium sativum)

- Stimulate appetite and digestion
- Effective against bacteria, viruses and parasites
- Dissolve viscous mucous in the bronchial tubes
- Improve blood flow
- Promote and detoxify gut flora





• Key ingredients: allium oils, flavonoids, enzymes, vitamins B1, B2, B6, E, C

Field horsetail (Equisetum arvense)

- Strengthens connective tissue, diuretic and stimulates the metabolism as a result of high silicic acid content
- Useful for urinary tract infections and kidney/bladder stones
- Strengthens the lungs
- Used for rheumatism and chronic skin conditions
- Helpful in cases of bladder sphincter weakness and incontinence
- Key ingredients: silicic acid, flavonoids

Common nettle, small nettle (Urtica dioica, Urtica urens)

- Contain minerals and trace elements
- Contain anti-inflammatory and diuretic substances
- Stimulate metabolism and excretion, meaning improved excretion of metabolic waste products such as kidney/bladder gravel and stones
- Used for diseases involving chemical build-ups (e.g., kidney stones), skin impurities and rheumatic conditions
- Key ingredients: flavonoids, silicic acid, calcium and potassium salts

Milk thistle (Silybum marianum)

- Helps to protect and regenerate the liver, stimulates the gallbladder, is an antioxidant and prevents ulcers, is anti-inflammatory and counteracts arthritis
- Used in a supportive capacity in cases of toxic liver damage and for supportive treatment in chronic inflammatory liver diseases, also recommended for cirrhosis of the liver
- Used in cases of poisoning, digestive disorders and gallbladder problems
- Used externally against ulcers
- Key ingredients: flavonoids (silymarin complex), fatty oil

Rosehip (Rosa canina)

- Antioxidant
- Used to treat colds and flu-like infections



Rosehip



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INGREDIENTS

- Used for intestinal diseases, diarrhea and digestive disorders
- Used for vitamin C deficiencies and infectious diseases, and as a tonic
- Used in diseases relating to the draining of the urinary tract, in urinary gravel and stone formation and to promote bile and urination
- Used for edema, gout and rheumatism
- Key ingredients: vitamins, minerals, flavonoids, tannins

Purple coneflower (Echinacea purpurea)

- Impacts the immune system, kills bacteria, viruses and fungi, and promotes wound healing when used externally
- Used internally to improve the body's defenses against recurrent respiratory and urinary tract infections
- Key ingredients: mucilage, flavonoids

Gastrointestinal system

Diet is the key factor in gastrointestinal health and therefore the general health and well-being of the animal. The stomach and bowel form the digestive tract. Where disorders occur in this area, they are often related to feed quality. The liver and pancreas also play an important role in digestion.

Peppermint leaves (Mentha x piperita)

- Stimulates appetite and digestion, choleretic, antispasmodic, anti-inflammatory, analgesic
- Used against viruses, bacteria and fungi and generally invigorating
- Can be used for indigestion, nausea, vomiting, flatulence, bile duct spasms and gastrointestinal mucus membrane inflammation
- Key ingredients: essential oil, tannins, flavonoids

Peppermint leaves



Ginger

Ginger (Zingiber officinale)

- Anti-nausea, anti-inflammatory, antibacterial, promotes digestion, stimulates blood circulation
- Stimulates appetite, digestive juice production and gastrointestinal movement
- Encourages flatulence
- Prevents travel sickness and vomiting
- Used to treat coughs and sore throats
- Used for rheumatic conditions
- Key ingredients: pungent substances, bitter substances, essential oil, starch

Dwarf mallow, common mallow (Malva neglecta, Malva sylvestris)

- Soothe irritation and coat mucus membranes due to their high mucilage content
- Can be used for inflammation of the gastrointestinal mucus membranes and mild diarrhea
- Key ingredients: mucilage, flavonoids, tannins

Chamomile flowers (Matricaria chamomilla)

- Anti-inflammatory, germicidal, expectorant, alleviate flatulence, promote digestion
- Used for intestinal cramps, colic, flatulence, vomiting, gastrointestinal inflammation and ulcers
- Key ingredients: essential oil, mucilage, flavonoids, coumarins

Sage leaves (Salvia officinalis, Salvia triloba)

- Stimulate appetite, normalize digestion, relieve spasms in the gastrointestinal tact
 - Effective against viruses, bacteria and fungi, inhibit inflammation, relieve pain
 - Fresh plants are particularly effective at inhibiting sweat production and lactation

INGREDIENTS



Carrot

 Key ingredients: essential oil, flavonoids, tannins, bitter substances

Carrot (Daucus carota ssp. sativus)

- Germicidal, antispasmodic, antioxidant
- Good for eyesight
- Contains vitamins
- Used for digestive disorders, diarrhea and nutritional disorders
- Also used against colds and respiratory diseases
- Stimulates growth
- Used to treat diuresis and edema



Key ingredients: beta-carotene, sugar, flavonoids, pectin

Bronchial system

The respiratory tract directs the breath, ensuring that oxygen enters the blood and carbon dioxide is expelled. Diseases of the lungs and respiratory tract are usually caused by several factors at play simultaneously. Such diseases are primarily inflammations – widely triggered by irritation of the mucus membranes or by colds.

Ribwort plantain (Plantago lanceolata)

Soothes irritation, inhibits inflammation, coughs and other respiratory diseases

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Chamomile

- Strengthens (lung) tissue
- Effectively counters bacteria
- Key ingredients: mucilage, aucubin (antibiotic), flavonoids, tannins, silicic acid

Anise (Pimpinella anisum)

- Promotes digestion and blood circulation
- Stimulates all digestive juice production
- Expels flatulence and regulates intestinal activity by loosening spasms
- Expectorant and relieves bronchial spasms
- Stimulates lactation
- Repels vermin
- Effective against bacteria, fungi and viruses
- Key ingredients: essential oil, flavonoids, fatty oil

Sage leaves (Salvia officinalis, Salvia triloba) See above

Rosehip (Rosa canina)

See above

Nervous system

Just like humans, animals can also find themselves in stressful and frightening situations that lead to behavioral problems and affect the animal's life. Factors such as noise, thunderstorms or traffic can

disturb the animal's daily routine. Age can also have an effect on the central nervous system and can lead to restlessness.

(True) valerian (Valeriana officinalis)

- Sleep-inducing, anti-anxiety, antispasmodic, muscle relaxant
- Used supportively for restlessness, nervousness and excitability
- Used internally for stress, hysteria, restlessness and anxiety, cramps and muscle spasms as well as for gastrointestinal disorders caused by nervousness, mild colic (e.g., due to stress caused during transportation)
- Appetite stimulant
- Key ingredients: essential oil, sesquiterpenes, glycosides

Musculoskeletal system

Bones, muscles, joints and tendons are all part of the musculoskeletal system. As well as generating movement, they also protect the internal organs and give the body support and form. Musculoskeletal development, and therefore physiological resistance, depends on the species of animal. Movement is a key way that animals can express how they are feeling.

Devil's claw (Harpagophytum procumbens)

- Anti-inflammatory, mildly analgesic and anti-rheumatic
- Useful against joint arthrosis and back pain
- Stimulates appetite and bile





- Helpful in cases of appetite loss and digestive problems
- Used internally for gastrointestinal complaints, pain, rheumatism, arthritis
- Key ingredients: iridoid glycosides, flavonoids, triterpenes

Horseradish (Armoracia rusticana)

- Germicidal, antispasmodic, stimulates blood circulation
- Used internally for respiratory tract infections, urinary tract infections, digestive support and flu-like infections
- Recommended externally to stimulate blood circulation for mild muscle pain as well as to treat gout and rheumatism
- Key ingredients: glucosinolates, essential oil, coumarins, phenolcarboxylic acids, vitamin C

Ginger (Zingiber officinale)

See above

It is vital to adapt the dose and, if necessary, the general compatibility of the medicinal herbs to the needs of each species as well as to each individual animal. Age, sex, physical condition, body weight and the general clinical presentation all play a role here.

It is recommended to give animals plants from controlled cultivation or certified wild harvesting only. The time of harvest is crucial for both types of production, as this bears a major influence on the active ingredient content. Proper harvesting, drying and storage ensure that active ingredients are preserved as well as possible during further processing. Specialized production facilities also ensure the medicinal herbs in question are consistently of the highest quality. This is done through certified laboratory analyses whereby the plants are tested for identity, content and purity in accordance with the European Pharmacopoeia. After all, alongside the efficacy of the medicinal plant, product safety also has a vital role to play in phytotherapy and in the nutrition of pets and livestock.

The Author

Michael Kämmerer works in marketing at Kräuter Mix GmbH in Abtswind, Germany. The company specializes in the production of air-dried herbs, vegetables and spices. Kräuter Mix also supplies its plant-based raw materials in various processed forms and as both individual ingredients and blends to the animal feed industry. Disclaimer: All the information in this text has been researched to the best of our knowledge and checked with the greatest possible care. However, we cannot accept any liability for any negative effects or damage caused by the use of the medicinal plants described here on animals.

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