

Friday, April 3rd, 2020

Plant antibiotics

Plants protect themselves against various enemies (bacteria, fungi, viruses, herbivores) with secondary substances and use a whole range of active ingredients, e.g. mustard oils, allicin, iridiodes, terpenes or polyphenols. As a result, plants have an antibacterial, antifungal, antiviral and anti-inflammatory effect – they are a natural antibiotic.

Such antibiotic ingredients include:

Essential oils (e.g. in thyme, sage, chamomile)

- Allicin, sulphurous compounds (e.g. in garlic, onion, ramson)
- Aucubin (e.g. in ribwort)
- Tanning agents (e.g. in bloodroot and sage)
- Hyperforin (in St. John's wort)
- Mustard oils (in nasturtium, horseradish, watercress)
- Saponins (e.g. in ivy)

Such natural antibiotics, also known as phytobiotics, inhibit the growth of microorganisms (this is called antibiosis) and cause neither resistance nor damage to the natural germ colonization of the intestinal mucosa; they are practically free of side effects.

The main advantages of plant antibiotics therefore include that

• they are effective against a broad spectrum of pathogens and at the same time strengthen the immune system.

- they are simultaneously effective against viruses and fungi.
- they do not damage the intestinal flora.

Phytobiotics have been known for a long time. Even in ancient times, the antibacterial properties of leek vegetables were known in the Orient. Leeks and mustard oil plants

such as watercress, nasturtium and horseradish contain strong antibacterial "mustard oil glycosides". The sulphur compounds contained therein are excreted from the body through the respiratory tract and the urinary tract and develop antibacterial properties for hours. They can, among other things, reduce the risk of superinfection.

In the Middle Ages fumigation was done with juniper, thyme, angelica and lavender. It was already known that the vapours of essential oils have a germ-inhibiting effect. Such a germ inhibiting, disinfecting effect on the respiratory tract exists in more or less all plants that contain essential oils (especially conifers), but also in spices such as anise, cloves, ginger, turmeric, pepper, thyme and cinnamon. As a kitchen antibiotic, garlic and wild garlic are undisputed in their antiseptic properties. The Swiss "herbal priest" Johann Künzle (1857 – 1945) wrote: "When typhoid, cholera or other epidemics go around, garlic should be enjoyed daily."

Sage is also one of these plants, which we can use in many ways to boost our health. You will learn more about this medicinal plant in our next article.

Published Friday, April 3rd, 2020 in the categories <u>Health</u>, <u>Coronavirus</u> https://www.naturalscience.org/news/2020/04/plant-antibiotics/

©2021 The World Foundation for Natural Science