



LOCAL ACTIVITY OF PLANTS AFFECTING THE NERVOUS SYSTEM AND THEIR PRODUCTS

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Abstract

Plants have always been a rich source of bioactive compounds that interact with the human body in various ways. Among the many physiological systems they can affect, one of the most interesting is the nervous system. The local activity of certain plants and their products can have profound effects on our neurological health and well-being. Medicinal plants have long been used for their powerful effects on the body, including the nervous system.

Key words

plants, products, essential oils, lavender, form copy.

Alkaloids, a class of natural compounds widely distributed in plants, exert various pharmacological effects on the nervous system. Plants such as Aconitum and Belladonna contain alkaloids that affect neurotransmitter function leading to therapeutic and toxic effects. Essential oils from aromatic plants affect mood and emotions through aromatic pathways famous for his ability to hide. Compounds such as linalool in lavender, chamazulene in chamomile, and menthol in peppermint have a calming or stimulating effect on the nervous system. Aromatherapy using essential oils from this plant is a popular practice to promote relaxation and mental well-being. Herbs and plant extracts are commonly used as natural remedies to support nervous system health. Herbal supplements such as valerian root for sleep disorders or St. John's wort for mood support work by modulating neurotransmitter activity. Adaptogenic herbs such as Ashwagandha and Ginseng help the body adapt to stress and maintain neuroendocrine balance, thereby supporting the overall functioning of the nervous system plays a decisive role in determining therapeutic benefits.

By studying the chemical composition and biological activity of plants, researchers can discover new compounds that target specific pathways in the nervous system, offering new opportunities for drug development and integrative medicine. Although the compounds may provide valuable benefits for nervous system health, their use should be approached with caution. The strength and effects of these compounds can vary widely and may interact with medications or underlying health conditions. Before adding plant-based products to your healthy lifestyle, it is recommended that you consult your doctor to ensure their safe and effective use.

The local activity of plants that affect the nervous system and their products can cover a wide range of natural substances with different effects. Many plants contain active substances that can affect the nervous system includes. For example, alkaloids found in certain medicinal plants such as Aconitum, Belladonna, etc. have neuroactive properties. Essential oils obtained from plants such as lavender, chamomile, and peppermint are known for their calming or stimulating effects on the nervous system. These oils are often used in aromatherapy for relaxation or mood enhancement. Certain herbal supplements, such as valerian root for sleep or St. John's wort for mood support, can be used for specific effects. affects the nervous

system. Adaptogenic herbs such as Ashwagandha, Rhodiola or Ginseng help the body adapt to stress and support the health of the general nervous system. The study of the bioactive compounds of plants, known as pharmacognosy, examines the potential medicinal uses of plant substances, including their effects on the nervous system. There are also plants with psychoactive properties that affect the nervous system, e.g. cannabis (marijuana), psilocybin mushrooms or Ayahuasca have traditionally been used for various purposes.

It should be noted that the effects of the substances obtained from these plants on the nervous system can be very diverse, from calming and relaxing effects to stimulating or even psychoactive effects. As with any natural product or supplement, it is important to consult a healthcare professional before using them, especially if you have an existing health condition or are taking medication.

Plants are not only essential to our ecosystem, but they also have amazing properties that have been used medicinally and therapeutically for centuries. In addition to traditional use, some plants exhibit unique properties that directly affect the nervous system and affect various physiological processes in humans and animals. Understanding the local activity of these plants on the nervous system and their products sheds light on their potential benefits and implications for health and well-being shown to interact with pathways. Some of these compounds act as neurotransmitter modulators, receptor agonists, antagonists, or enzyme inhibitors, affecting synaptic transmission, neuronal excitability, and neuroprotective mechanisms. By targeting specific pathways in the nervous system, plant-based compounds can affect mood, cognition, pain perception, and overall neurological health. Some plants have neuroprotective properties, such as They help protect neurons from damage, degeneration, or inflammation. Plant extracts rich in antioxidants, anti-inflammatory agents, and neurotrophic factors have shown promise in mitigating oxidative stress, reducing neuronal death, and promoting nerve regeneration and repair. These neuroprotective effects have the potential to fight neurodegenerative diseases such as Alzheimer's, Parkinson's, and stroke by preserving brain health and function. Some plants contain psychoactive compounds that directly affect brain function, mood, cognition, and consciousness. Plants such as cannabis, the opium poppy, and psychedelic mushroom contain cannabinoids, opioids, and hallucinogens that interact with specific receptors in the brain to produce altered states of consciousness, euphoria, and pain causes loss of pain or hallucinations. The psychoactive properties of these plants highlight the complex interactions between plant compounds and the nervous system, raising important questions about the therapeutic potential and risks associated with their use have long used plant-derived compounds to treat a variety of ailments, including anxiety, depression, insomnia, and cognitive decline. Phytochemicals found in plants such as ginkgo biloba, St. John's wort, and valerian root have shown anxiolytic, antidepressant, sedative, and cognitive effects through interactions with neurotransmitter systems, neurotrophic factors, and neuronal signaling pathways. The effectiveness of these plant-based remedies in alleviating neurological symptoms highlights the therapeutic potential of natural compounds for mental health and cognitive function. The study of the local activity of plants and their products in the nervous system has led to scientific research, drug discovery and opens new avenues for complementary medicine.

CONCLUSION.

In conclusion, the local activities of neuroactive plants and their derivatives present a diverse and interesting picture of natural agents and potential therapeutic agents. Exploring the synergistic relationship between plants and the nervous system not only provides insight into traditional therapies, but also paves the way for innovative approaches to neurological health and well-being.

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