

МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ  
НАЦІОНАЛЬНИЙ ФАРМАЦЕВТИЧНИЙ УНІВЕРСИТЕТ  
КАФЕДРА ПРОМИСЛОВОЇ ТЕХНОЛОГІЇ ЛІКІВ ТА КОСМЕТИЧНИХ ЗАСОБІВ  
КАФЕДРА АПТЕЧНОЇ ТЕХНОЛОГІЇ ЛІКІВ

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## REPRESENTATIVES OF THE WORLD FLORA THAT ARE SOURCES OF ADAPTOGENE COMPOUNDS

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**Introduction.** Adaptogens are natural or synthetic substances that help the body adapt to stress and maintain balance and homeostasis. They work by regulating the adrenal glands, which control the hormonal response to stress.

Adaptogens can help support the body during martial law, reducing stress and fatigue, increasing endurance and strengthening immunity, exhibiting a normalizing effect - they do not stimulate or suppress the body's work, but help restore balance. One of the stress hormones is Cortisol, which is produced by the adrenal cortex, which performs a significant number of functions, including affecting metabolism, the immune system, blood glucose levels, blood pressure, and circadian rhythms.

Post-traumatic stress disorder is widespread in Ukraine among military personnel and civilians, in which a person feels anxiety, loss of strength, confusion of feelings, and devastation. Short-term memory is impaired. Due to a decrease in concentration, a person begins to make many mistakes. At the stage of exhaustion, the body's overall resistance decreases sharply, which can lead to an exacerbation of a chronic or developing a new physical disease. The use of adaptogens is relevant for the prevention and relief of symptoms.

**Aim of investigation.** To monitor the range of medicinal plants of traditional and evidence-based medicine in the world, which are known adaptogens, and their basic compounds responsible for pharmacological activity.

**Methods of investigation.** Content analysis of available databases.

**Results of investigation.** Traditionally, adaptogenic effects are exhibited by phenylpropanoids, triterpenoids, saponins, alkaloids, proteoglycans and polysaccharides. A significant number of representatives of the families *Araliaceae*, *Fabaceae*, *Shizandraceae*, *Asteraceae*.

Recently, dietary supplements based on plant raw materials from representatives of East Asian countries, Japan, have been actively offered: *Bacopa monnieri* (*Plantaginaceae*), *Lepidium meyenii* (*Brassicaceae*), *Tinospora cordifolia* (*Menispermaceae*), *Reunoutria japonica* (*Polygonaceae*), *Pimedium rubrum* (*Berberidaceae*), *Angelica keiskei* (*Apiaceae*), *Centella asiatica* (*Apiaceae*), *Ocimum Indiana* (*Lamiaceae*), *Withania somnifera* (*Solanaceae*), *Curcuma zedoaria* (*Zingibraceae*), *Zingiber officinale* (*Zingibraceae*).

Also, a significant role will be played by products of green and brown algae, representatives of the *Fungi* kingdom, as well as beekeeping products, maral antlers, shark fat, salmon milk, snail mucus, peat and sapropels.

**Conclusions.** Thus, the creation of domestically available combined drugs of various compositions for the development of long-term courses of prevention and treatment of stress conditions in war conditions is promising.