

## EFFECTS OF PHYTOPHERON ON THE CENTRAL NERVOUS SYSTEM

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**Purpose of the work:** The territory of the Republic of Uzbekistan is a country rich in medicinal herbs. On the basis of medicinal plants, which are widely used in folk medicine and scientific medicine by scientists of our institute, a new plant collection has been developed, which is intended for use in cases of iron deficiency, and its 10% tincture drug form is conditionally called “Phytopheron”. The study of the effects of phytopheron on the central nervous system through its effects on the effects of sleeping and narcotic drugs.

**Method of work:** experiments were carried out in 36 male mice, in the case of T.A. Voronina and L.N. Nerobkova (2000y) and M.N. Egamberdieva (2005y), and in the case of a partial modification of the M.N. Nikolaev method. Because female mice have a higher sensitivity to sleeping and narcotic drugs. As sleeping and Narcotic Drugs, a drug of selective action was used in relation to the cerebral cortex – chloralhydrate, and a drug of selective action - hexenal-in relation to the cerebral compartments under the cerebral cortex. Sleeping and narcotic preparations were sent to the abdominal cavity of animals. Mice in the control group were injected with hexenal (at a dose of 70 ml/kg) and chloralhydrate (at a dose of 300 mg/kg) 30 minutes before being injected with water, respectively, and animals in the experiment were injected with phytopheron at doses of 5 ml/kg and 10 ml/kg, under their skin. The results obtained were presented in the table below.

**Results obtained:** as can be seen from the results in the table, the studied aggregate increases the sleep release time of the sleeper and narcotic at the level of mathematical accuracy in the studied doses. If the time of sleep released to the surface at hexenal 70 mg/kg was equal to  $43.5 \pm 3.57$  minutes in mice, the sleep time in mice receiving the studied assembly at 5 ml/kg doses was equal to  $72.6 \pm 4.27$  minutes. Under the same conditions, phytopheron increased the sleep time of hexenal by 81.7% at doses of 10 ml/kg, and it averaged about 79.1 minutes.

Both doses of phytopheron have had a positive effect on the time of sleep released to the surface with chloralhydrate. Phytopheron extended the sleeping time

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on the surface with chloralhydrate at 5 ml/kg doses by an average of 38.3%, and at 10 ml/kg doses – 61.3%, and in this case, when chloralhydrate was used in combination with phytopheron, the sleep time of chloralhydrate was  $97.5 \pm 4.65$  and  $113.7 \pm 13.48$  minutes, respectively.

**Effects of phytopheron on sleeping and narcotic drugs (  $M \pm m$ ;  $n=6$  ).**

No	Name of drugs	Dosage of administered drugs	Average sleep time, $ET_{50}$ (per minute)	Effects of drugs on sleep time (%)
1.	Hexenal	70 mg/kg H <sub>2</sub> O	$43,5 \pm 3,57$	100,0
2.	Phytopheron + Hexenal	5 ml/kg + 70 mg/kg	$72,6 \pm 4,27$	$166,89^*$
3.	Phytopheron + Hexenal	10 ml/kg + 70 mg/kg	$79,1 \pm 4,95$	$181,83^*$
4.	Chloralhydrate	300 mg/kg	$70,5 \pm 5,58$	100,0
5.	Phytopheron + chloralhydrate	5 ml/kg + 300 mg/kg	$97,5 \pm 4,65$	$138,29^*$

6.	Phytopheron + chloralhydrate	10 ml/kg + 300 mg/kg	113,7±13,48	161, 27*

Note \* - the level of mathematical accuracy with respect to the result in the initial (control) group is R=0.05.

**Conclusion:** this means that the drug phytopheron, consisting of a collection of plants under study, has a sedative – calming effect on the central nervous system. As a result, the sleep time of sleeping pills and narcotic drugs is prolonged at the level of mathematical accuracy under the action of phytopheron. The analysis of the action of phytopheron on the cerebral cortex and the brain compartments under the cerebral cortex showed that it affects the brain compartments under the cerebral cortex to a stronger extent.

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