

## **Neuroprotective activity of hydroponic Teucrium polium following bilateral ovariectomy**

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Ovariectomy is known as “surgical menopause” with decreased levels of estrogen in female rodents. Its reported risks and adverse effects include cognitive impairment. The action of hydroponic Teucrium polium on nucleus basalis of Meynert (bnM) neurons following 6 weeks of ovariectomy was carried out. The analysis of spike activity was observed by on-line selection and the use of a software package. Early and late tetanic, - posttetanic potentiation and depression of neurons to high frequency stimulation of hippocampus were studied. The complex averaged peri-event time and frequency histograms were constructed. The histochemical study of the activity of Ca<sup>2+</sup>-dependent acid phosphatase was observed. In conditions of hydroponic Teucrium polium administration, positive changes in neurons and gain of metabolism leading to cellular survival were revealed.

The administration of Teucrium polium elicited neurodegenerative changes in bnM