3rd Symposium of Young Researchers on Pharmacognosy

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BOOK OF ABSTRACTS

University of Szeged
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(ed. Tivadar Kiss, Judit Hohmann)

Department of Pharmacognosy, University of Szeged, Szeged, Hungary

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Examination of *Artemisia annua* for the prevention and adjunctive treatment of West Nile virus infection in horses

Zsanett Janka Tóth

Email: zsazspac@gmail.com

Artemisia annua (sweet wormwood) has been used in traditional Chinese medicine for centuries to treat fever, treat infections transmitted by mosquitoes and other infectious vectors. Studies on the analytical and antioxidant capacity of previously published articles have demonstrated that *Artemisia annua* is capable of producing large amounts of phenolic compounds that have shown highly active antioxidant capacity. Complementary treatment for malaria infection registered by the WHO since 2004. Like the malaria virus, mosquitoes are the transmitter and carrier of West Nile virus. West Nile virus (WNV) is a zoonotic virus belonging to the genus *Flaviviruses* that causes nervous system diseases in birds, humans and horses. After an incubation period of 3 to 15 days after infection, clinical symptoms suddenly appear, occurring in a variety of ways, to varying degrees and duration. In horses that have survived the disease, there may be residual symptoms that may improve over time, often resulting in a deterioration in the horse's quality of life, or death due to residual symptoms.

The treatment of West Nile virus disease is symptomatic, as there is currently no active ingredient for specific therapy. The vaccine is available, but its protection is uncertain.

The goal of my work is to create a dietary supplement that can provide protection against WNV infection, and it can also be used as an adjunct treatment for an existing infection. I grow the plants needed for the study, so I am also involved in the creation of the cultivation technology.

Supervisor: Hohmann Judit

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