*Rastitelnye Resursy.* 53(4): 543—554, 2017

# GROWING EXPERIENCE OF *TARAXACUM HYBERNUM* (ASTERACEAE)

© *B. R. Kuluev*,*[1, 2] *A. I. Kartuha*,[2] *A. V. Knyazev*,[1] *A. F. Fateryga*,[3] *A. V. Chemeris*[1]

[1]Institute of Biochemistry and Genetics of Ufa Scientific Center of RAS, Ufa, Russia

[2]Bashkir State University, Ufa, Russia

[3]T. I. Vyazemsky Karadag Scientific Station – Nature Reserve of RAS, Feodosiya, Russia

*E-mail: kuluev@bk.ru

SUMMARY

Due to the growing global demand for natural rubber and the danger of the disease spread in the Brazilian rubber trees, the urgency is growing to find alternative natural sources of this raw material. One of the alternative sources of natural rubber is *Taraxacum hybernum* Steven growing in the Crimean peninsula. For the first time after nearly 70-year hiatus of domestic rubber plants study, we have searched for *T. hybernum* plants in Crimea. *T. hybernum*, also known as the krym-saghyz, was collected form ten different sampling poins of the Crimean peninsula. It was shown that the germination of seeds of *T. hybernum* can be increased by pre-incubating seeds in a solution of gibberellins. To increase the simultaneity of seed germination, the technology of preliminary incubation of seeds at +5 °C for three days has been developed. The high efficiency of hydroponic cultivation of krym-saghyz as compared to cultivation on soil is shown. Also, the possibility of a double yield of the roots of krym-saghyz from the same plants under hydroponic conditions is shown. It is of great interest to study the quantitative and qualitative characteristics of natural rubber of hydroponic krym-saghyz using modern methods of physical and chemical biology.

Key words: *Taraxacum hybernum*, *Taraxacum kok-saghyz*, krym-saghyz, Russian dandelion, seed stratification, hydroponics.