

**МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РФ
ТОМСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ
БИОЛОГИЧЕСКИЙ ИНСТИТУТ**

СТАРТ В НАУКУ

МАТЕРИАЛЫ

**LXX научной студенческой конференции
Биологического института**

Томск, 26–30 апреля 2021 г.

**Томск
2021**

DARK FOREST BEE: ECOLOGICAL AND GENETIC CHARACTERISTICS OF BEE COLONIES

T.V. Nikitina
nikitinatanyatop@mail.ru

The dark forest bee (*Apis mellifera mellifera* L.), or the Middle Russian bee is one of the 30 subspecies of the honey bee. It is larger than other subspecies, hardy, resistant to long and cold wintering, and resistant to several diseases, capable of intensive honey collection. Currently, in Russia, the Middle Russian bee lives mainly in the Southern Urals, Western Siberia, and the central part of the country.

This work is a fragment of a comprehensive study of the honey bee, conducted at Tomsk State University, and is devoted to the ecological and genetic characteristics of bee families of the Middle Russian breed. During 2016–2020, families bred in the Middle Russian bee farm (Tomsk) moved to apiaries in different regions of Siberia and the Urals, including the northern ones (Khanty-Mansi Autonomous Okrug, Tomsk Region) in order to assess their adaptive potential (characteristics of biological and economically significant indicators of families in the new conditions).

Studies have shown that the dark forest bee has adapted well to different natural and climatic conditions. Bee colonies showed high viability, winter hardiness, and productivity even in the northern regions of Siberia, where no other subspecies of bees can winter. Beekeeping methods had a significant impact on the successful breeding of bee colonies. At the same time, in the presence of high-quality source breeding material and constant monitoring of the purebred families and queens, adjusting the methods of beekeeping, it is possible to maintain and breed families with high biological and economic indicators in various natural and climatic conditions, including the northern regions of Russia.

Academic advisors – researcher of the SPC «Apis» S.A. Rosseikina, senior lecturer E.A. Melnikova