

AN INVESTIGATION ABOUT MORPHOLOGY AND BIOLOGY OF *AIOLOPUS THALASSINUS* F. UNDER LABORATORY CONDITIONS

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Summary

Aiolopus thalassinus F. is a native grasshopper distributed in south European part of the U.S.S.R. including the Ukraine, Middle Asia, southern and partially Central Europe, North Africa, and China. This insect is polyphagous and feeds on quite a variety of cultivated and non cultivated plants.

It could be found on the edge of the farms, rivers, irrigation canals and at the foot of the hills.

The adults of *A. thalassinus* F. are about 15–23 mm in male and 21–29 mm in female with varying colour from green to grayish yellow. This species could be identified from related species by these characters:

Frontal ridge flat or slightly convex, median carina thin, low, intersected by one transverse groove, no lateral carina, wings without the darkband, the inner part of the ventral aspect of hind femur red. Different instars could be separated by length of body-wings size - number of antennal segments and length of hind femur.

In an attempt to make laboratorial studies the adults were collected from the field and reared in 42×38×38 cages under 27–35 OC temperature 35% – 60% R.H., and 9 hour of light per day, and the grasshoppers were fed with fresh alfalfa cuts, lettuce and cabbage. The egg capsules were collected in cylindrical tubes containing sterilized moist sands installed at bottoms of the cages. For incubation of eggs the tubes were covered with white material and located in the incubator at 28–33 OC which was regarded as optimum temperature. The incubation period under these conditions is about 17 to 21 days.

Under laboratory conditions the minimum and maximum period for different stages and instars are as follow;

incubation period	17–21	days
1st instar	5–7	»
2nd »	4–7	»
3rd »	4–7	»
4th »	6–8	»
5 th »	7–9	»
adult stage (average)	40	»

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Laboratory and field studies indicated that this insect do not passes true diapuse and under favorable conditions can reproduce continuously.

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