پیشرفت فنوتیپی مقاومت لاین‌های کرم ابریشم ایران به بیماری گراسری طی یک نسل انتخاب

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(*Bombyx mori*)   :

Phenotypical Improvement for Resistance of Iranian Silkworm Lines Against Grasserie Disease Through one Generation of Selection

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Abstract

In order to improve resistance of eight Iranian silkworm pure lines including lines with Japanes origin:

103.M.1.1, 107, 31 and 103, and with Chinese origin: Koming, 110.104, 104 and 110 against grasserie

disease, an experiment was conducted during 2002 and 2003. Phenotypic changes for number of alive larvae, number of alive pupae and pupae vitality percentage is estimated by means of average differences of these characters at two successive generations in control and infected conditions. In order to induce infected conditions, larvae were inoculated by NPV virus at the beginning of fourth instar. Individuals of superior family for pupation rate were selected to produce next generation. Lines with Japanese origin in the larval stage and with Chinese origin in the pupal stage showed higher resistance. The direct phenotypic response of resistance characteristics was higher in Japanese group than Chinese lines.

Keywords: Grasserie, Nuclear Polyhedrosis, Phenotypic alteration, Resistance, Silkworm *(Bombyx mori)*

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$y_{ijkl} = \mu + V_i + T_j + Y_k + e_{ijkl}$

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