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Species Composition of Lepidoptera (Insecta: Lepidoptera) Inhabited on the Saxaul (Chenopodiáceae: Haloxylon spp.) in the Desert Area of South-East Kazakhstan

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Abstract : At the present time in Kazakhstan, the area for saxaul growing is strongly depopulateddue to anthropogenic and other factors. To prevent further reduction of natural haloxylon forest area their artificial crops are offered. Seed germination and survival of young plants in such haloxylon crops are very low. Insects, as one of the most important nutrient factors have appreciable effect on seed germination and saxaul productivity at the all stages of its formation. Insects, feeding on leaves, flowers, seeds and developing inside the trunk, branches, twigs, roots have a change in its formation and influence on the lifespan of saxaul. Representatives of Lepidoptera troop (Lepidopteraare the most harmful pests forsaxaul. As a result of our research we have identified 15 species of Lepidoptera living on haloxylon which display very different cycles and different types of food relations. It allows them to inhabit a variety of habitats, and feeding on various parts of saxaul. Some of them cause significant and sometimes very heavy damage for saxaul. There are 17identified species of Lepidoptera from the Coleophoridaefamily - 1, Gelechidae - 5, Pyralidae - 4, Noctuidae - 4, Lymantridae- 1, Cossidae - 2 species. At the same time we found 8 species for the first time, which have not been mentioned in the literature before. According to food specialization they are divided into monophages (2 types), oligophages (6 species) and polyphages (3 species). By affinity to plant parts, leaves and seeds are fed by 8 species, shoots by 1 specie, scions by 5 species, flowers, scions, seeds by 1, and 2species damage the roots and trunks. In whole installed seasonal groups of Lepidoptera - saxaul pests in the desert area, confined to the certain parts of the year, as well as certain parts of the plant for feeding. Harmfulness, depending on their activity appear during the growing season is also different.

Keywords : saxaul, Lepidoptera, insecta, haloxylon
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