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CHARACTERISTICS OF DISTRIBUTION OF APHIS CRACCIVORA APHID IN THE VERTICAL REGIONS OF SOUTHERN FERGANA

Abstract: The distribution of aphid in nature is strongly influenced by soil and climatic conditions in the regions. There are peculiarities in the distribution of aphid species in the lowland, foothill, mountain, middle mountain and high mountain regions. Like other insects, the common species of aphids live in sharply changing climatic conditions as they cover a number of natural and vertical regions.

In order to determine whether the distribution of aphid across vertical regions is inextricably linked to soil-climate, vegetation, developmental modification, and other biological characteristics, the founders identified the release dates of wingless and winged live-bearing females and autumn morphs, as well as boreal or North and the number of generations of common species in the South has been compared and analyzed.

Key words: low plain region, foothill region, mountain region, middle mountain region, high mountain region, aphidofauna, xeromorph, mesophilous, wingless live female, winged live female female, polyphagous, cosmopolitan.

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Introduction

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The peculiarity of soil-climatic conditions and plant cover in the vertical regions of Southern Fergana is reflected in the composition of the fauna of aphid distributed along different absolute heights, as well as their biological and ecological characteristics.

Rising from the low plains to the Middle Mountain region, the variety of the faunistic composition of the yellow grows. The scarcity of representatives of afidofauna in the upper mountain region is associated with severe climatic conditions of this land. For low plains are more typical of the kseromorph and mesophilic types of glazes.

Cinara tujifilina, Aphis rumicis, Aphis craccivora, Macrosiphum rosae in horizontal bands and various absolute heights.

From the vertical regions of the southern Fergana region, in the Middle Mountain region of the Alai mountain range, there are Cavariella bunii, Aphidura turanica, Hyadaphis aizenberg, Acyrthosiphon glaucii, Brevicorine loricarina,

Avicennina spiraeicola, Rhopalomyzus alaica, Rh. ferganica, Rh. tianshanica, Semiaphis longissima, Acyrthosiphon Rubi three. In other vertical regions, the distribution of these aphid is not noted.

From the bottom up, the biological and ecological characteristics of the species of aphid change gradually.

Changes in the biology of aphids are associated with the silencing of the periods of the development cycle. As the low plains alternate with the mountainous, medium-mountain and high-mountain regions, the output of eggs from which the larvae of the founders of aphid wintered is delayed, the periods of their development are prolonged, the founders are late matured; the larvae that the founders gave birth develop more slowly. More time is spent on the maturation of wingless and winged living breeds of females. Their off spring are reduced. Among generation appears early: egg-laying females and male sharks complete the life cycle of the sharks until the onset of the cold days of autumn.

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Many species of sharks that fly in the Middle Mountain and especially in the high mountain regions are characterized by low density of quantities.

Low content density of juices in mountain areas can be explained by high humidity as well as increased precipitation. Abundant and strong rains and cold temperatures cause a decrease in the amount density of glazes. For this reason, in higher regions than in the lowlands, the pest of sharks is less noticeable.

In the Middle Mountain region, some species of flying tree – shrub aphids (*Maclulolachnus submacula*, *Tuberolachnus salignus*, *Pterochloroides persicae*) live in cooperation with large red ants of the *Formica sanguine* species. Ants distribute their juices of this variety to other plants, protecting them from the liquid that separates them from themselves. Some of the features of the vertical – regional distribution of the aphids of the region under study can be interpreted by the example of the following species.

Black currant juice (*A. craccivora*) is a species of polyphagia and cosmopolitan, with many data on its prevalence, nutrition in various plants (Nevsky, 1929; Davletshina 1964; Mukhamediyev, 1979; Narzikulov, Daniyarova, 1990).

In southern Ferghana this shira *Caragana alaiica*, *Perovscia scrophulariifolia*, *Glyryrrhiza glabra*, *Medicago sativa*, *Arctium* sp. three in all vertical regions in plants.

In the lower plains (Fergana Urban), the larvae of the founders of *Aphis craccivora* from eggs (*Medicago sativa*) appear in the beginning and middle of March (5.03-15.03.2018). The period of their exit from the eggs depends on the vegetation of the plant. The larvae of the founders, which come out of the egg, mature on 15 – 18 day. Founders reach the end of March (22.03 - 25.03) and early April (2.04-4.04). From the larvae that the founders gave birth to, the aphid of the female, who gave birth to a living without wings, develops. Aphids that give birth to a living without adult wings are observed in mid-April (13.04-18.04). They multiply a lot during the months of April-may.

Winged living breeds of black currant juice appear at the end of April (27.04-29.04) and at the beginning of may. They migrate to husks and other plants from may (Davletshina 1964). A during the summer. *craccivora* is fed on a variety of plants. The Amoun generation of this species develops in low plains in October (11.10-24.10.2017, Fergana). Adult egg laying females and male sharks are threer in late October – early November (27.10-7.11). In addition to the fact that the year of winter comes warm, the black currant aphid winters in the egg phase, it also winters in the form of offspring who give birth to a living without wings (Fergana, 23.12.2017; 15.01.2018). This condition was also observed in other regions (Davletshina, 1952). During the year in the low plains of Southern Fergana *A.craccivora* forms 15-16 joints.

At *Aphis craccivora*, kseromorphic symptoms are weakened in the influence of the mesophilic conditions of the cultural landscape. At the same time, some changes occur in their body structure, some parts (tail, neck of the head) are reduced or absent (mustache, body, thigh) are observed. Black currant juice can be found in non-assimilated and assimilated land, in the mouth from the assimilated land, in the lungs, in white *Acacia* and in the pores. There are differences arising from changes in the size and morphological signs of wingless living breeds of females living in different plants (Mukhamediyev, Karaca, Siddicova, 1997).

Under the influence of mesophilic conditions, black currant juice quickly multiplies in white *Acacia*, gooseberries and other plants, forming large colonies in some nutrient plants (*White Acacia*). The increase in the quantity density of juice (sows depends on the presence of nitrogen, optimum air humidity and other) depends on favorable factors (Mukhamediev, 1991).

The exit of eggs from the larvae of the founders of aphid from the foothills in the foothills region (Vodil, Stepjoy) falls on the second ten days of March (16.03 - 19.03.2017). Larvae from eggs turn into mature founders on 20-23 day.

Females who give birth to a living without wings are given in the second (less often) and third decade of April in the foothills region (17.04-29.04.2018). Among the aphids that give birth to a living without wings from the larvae they give birth to a large number, the winged ones also develop. Females who give birth to a living with mature wings are observed in the first and second decade of May (7.05-16.05.2018).

In the foothill region (Valley, Pulgon, Stepjoy), the amonon generation of *Aphis craccivora* develops in late September – early October (28.09-5.10). Egg-laying females and male sharks are here in mid-October (8.10-20.10) sometimes until the end of three. In this region *A. craccivora* gives 13-15 generations during the year.

In the Middle Mountain region (Chokimardon, Yordon), black currant juice develops later than in other regions. The larvae of the founder juice come out of the eggs at the beginning of may (28.04-5.05.2018) at the end of the April in the larvae. They reach adulthood in the ychinch decade of May (21.05-28.05). Wingless living-bearing female candies are observed in the second decade of June (7.06-19.06), while winged living-bearing female candies are observed at the end of July (25.07).

In the Middle Mountain region, the Ampere generation of black currant juice develops in the first half of September (8.09-10.09). Egg-laying females and male sharks end of September – males end until the beginning of October (7.10.2017) threeraydi. In this region *A. craccivora* forms 9-10 generations.

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In the upper mountain region of the southern Fergana region, the larvae of the founders of black currant juice are found in wild currant (*Medicago sp.*) at the end of May - the first ten days of June (30.05-8.06) begin to hatch from eggs. They will become mature founders in late June and early July (27.06-4.07.2018). Reproductive juices that give birth to a living without a mature wing appear on the third decade of July (24.07). A small amount of winged living-born sharks tripled in August (16.08). Ampfigon generation develops in late August-early September (29.08-7.09). Egg-laying females and male sharks are observed in this region until the end of September (26.09-27.09). In the upper mountain region, the *Aphis craccivora* juice provides 5-6 generation in accordance with climatic conditions.

Black colostrum juice makes dressing large colonies on the stem of the nutrient plant (*Medicago sativa*) in low plains. They will have individuals up to 300-400 soles (29.04.2018, Fergana). The color of the candy is black, the body is clear shiny. It causes significant damage to cotton in agricultural crops in the foothills region. The colonies of *craccivora* are humus in the form of large-scale collections in the nutrient plant (*Medicago sativa*). The amount of juice in them reaches 150-300 soles. The color of the

mature juice is dark brown, dark, shiny larva-brown hungry black, gray porous.

In the Middle Mountain region, black currant juice forms colonies of medium size on the tip of the currant (*Medicago sativa*) – on the stem, on the leaf band. In them there will be individuals up to 40-80 soles. The color of the mature aphid is black, translucent; the color of the larvae is brown, dark brown, gray, porous.

In the upper mountain region, *Aphis craccivora* forms small colonies on leaves and flower branches in the tip of the wild hummock (*Medicago sp.*). In them, aphids are contained in 7-8; sometimes they are fed in a liquid state, individually. The color of the mature morphemes is black, the color of the larvae is dark green, the beetle is a black beetle. Increasing from low plains to high regions, there is an increase in the size of the body and parts of the black currant aphid. For example, the body length is 2.01 mm in low plains, 2.07 mm in the foothills, 2.14 mm in the middle foothills, 2.23 mm in the upper foothills, -1.22 mm in the foothills, -1.28 mm in the foothills, 1.33 mm in the middle foothills, 1.42 mm in the upper foothills. The axes and the numbers also move away. The 4 - th joint of the hip, the 2 - th joint of the hind leg, the length of the paw is kept almost unchanged in all regions.

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