

DOI: <https://doi.org/10.36719/2707-1146/44/37-40>**Emilya Aliyeva**Azerbaijan State Agrarian University
emmaaliyeva186@gmail.com

ECONOMIC IMPORTANCE OF CITRUS PLANTS

Abstract

The article discusses various directions of activity in the agricultural field, including the fact that fruit growing is the most important occupation of the population in the development of agriculture. Fruit growing is considered one of the ancient fields. Many types of Diaspididae harm citrus and fruit plants, ornamental plants, and more. Thus, it causes their leaves to dry out, fruit to fall out, and even the plant to perish. Cushions with California beetle (*Diaspidiotus perniciosus* Comst.), comma-shaped beetle (*Lepidosaphes ulmi* L.), Lemon beetle (*Pseudococcus citri* Risso.), etc. are more dangerous pests for plants. Diaspididae do more damage in warm subtropical and tropical countries. While the vast majority of diaspididae are pests, a small number are good. *Dactylopius cacti* common in Mexico, Kermes vermilion on the Mediterranean coast, *Margarodes polonicus* in Poland, *Porphyrophora hameli* in Transcaucasia, etc. are of great importance to industry.

Keywords: pest, fruit, breed, fight, agriculture

Introduction

The quantity and quality of fruit harvested in fruit growing are some of the key indicators that determine the development of this area. Unfortunately, there is still hope for more nature in fruit growing in our country. Even though the quality of fruit is high, it loses out to the competition in terms of appearance. At the same time, processing facilities are not very interested in local fruits because they are not very profitable for the industry. (Abbasov, 2010: 592).

Reliable food supply of the population in the Republic of Azerbaijan forms one of the main directions of the economic policy of the state. 2008-2022 State programs on the reliable food supply of the population in the Republic of Azerbaijan state that reliable food supply is the main condition of economic stability and social development of each country.

Fruit growing has become the most important activity of the population, being one of the historically formed agricultural fields in Azerbaijan. It is considered one of the ancient fields of fruitgrowing (Newspaper of Economy, 2008).

Citrus belongs to the family of the rue (Rutaceae Juss.), a subfamily of pomegranates or rednecks (Aurantioideae Engl.). Other well-known Soviet citrusologist scientists such as Rockosburg, Guker, Brandis, Engler, Swingl, Tanaka A.I.Luss were engaged in the classification of the pomegranate subfamily of some species after Linney. According to W.Swing, the pomegranate subfamily unites 33 gender and 203 species. More importantly, the genus citrus (*Citrus* L.) (Mustafayeva, 2004: 31).

Geraniums (lat. *Coccinea*), and citrus whitefly (*Dialeurodes citri*) are found in all orchards of Azerbaijan. The larvae move until they choose a permanent place, after which they have a sedentary lifestyle. Their bodies are covered by the pelvis. Geraniums sometimes grow so large that they cover the branches in shells. They absorb the tree's juice and produce red spots on the fruit. Fruit orchards are home to many types of geraniums. The most common of these is a purple comma-shaped *Pseudococcus citri* and *Diaspidiotus perniciosus*. In terms of its damage and spread, *Diaspidiotus perniciosus* occupies a more important place. Its body is yellow and covered with a round sink, damaging more than 150 species of plants. It accumulates on the branches, leaves, and fruits of the damaging fruit and ornamental plants, absorbs their juices, and eventually dries up damaged branches and leaves. It gives rise to two generations a year in the Lenkaran region (Gasimov, Babayev, 2004: 87).

Citrus whitefly is one of the main pests of more than 50 species of citrus plants in the world. Found in the early 60s, the pest inflicts damage in various regions of the republic, particularly in southern regions of citrus fruit growing. Citrus whitefly of farm importance harms many fruit growing areas, but also mainly citrus plants. The plants are lemon, orange, persimmon, fig, European ash, squash, ivy (*Hedera helix*), jasmine, *Laurus nobilis*, wild privet, magnolia, common oleander, coriander, common coriander, plum, common pomegranate, pear, etc. Citrus whitefly in fruiting causes damage to the plant mainly in the flowering fruiting solution after bearing, causing damage during the development of the organism i.e. after more crops have been absorbed (Mustafayeva, 2006:354).

Whiteflies dilute the plant's juice and damage it. Damage caused by the pest to the plant, in particular, fruit crops, results in crop loss. Thus, 20% of larvae of the species damage fruit plant leaves, 5-10% of productivity, 50% of damage is caused by a 50-55% decrease in yield, and 75% of leaves are practically completely lost.



Thus, the polyphagia of the Citrus whitefly, which is the quarantine object, spread 1-3 generations per year. It depends on climatic conditions, its ability to cause severe damage to citrus plants, fruit, and ornamental plants, its frequency of spread and its high productivity make it a dangerous pest. In view of the fact that it is also a new invasive species in Azerbaijan, measures should be applied to completely destroy all its fires without regard to their number if discovered (Mustafayeva, 2015:81).

Comma-shaped beetle mainly damages apples, pears, quinces, hawthorns, and partly plums, apricots, peaches and other plants. The female of *diaspidotus perniciosus* has a comma-shaped pelvis on the lumbar side formed from a waxed substance. Extraction of larvae from eggs that spend winter under the female's pelvis occurs after the trees bloom. In general, larvae take up to a month to hatch. Some of the young larvae initially adhere to stems and branches, while others adhere to fruits and leaves. Soon afterward, these larvae bark the tree and cover the pelvis after moving. In early September, the maid puts 100-120 eggs in a ball under her pelvis, and she herself dies after some time. The trees are weakened and their leaves fall, and when this condition persists for several years, the damaged trees are often trapped (Aghayev, 2004: 303). Citrus fruits of agricultural importance are more valuable for their high dietical and aromatic properties than for their chemical content. At the same time, storage time and stable preservation of the product content, which is rich in essential nutrients with a strong vitamin, further maintain the medical importance of such kinds of plants.



Comma-shaped Coccinea.

The recent inclement weather-with frequent rainfall and scorching sun has created a variety of pests and diseases in agriculture, specifically fruit growing and vineyard growing. It causes the increase of sucker pests in fruit orchards, which disrupt the photosynthesis process in plants and create obstacles to the normal development of plants. Thus, rainy weather causes the growth of different types of meanings, mammals, ticks, dactylopiidae in fruit orchards.

The species of this genus is believed to be formed in different subtropical and tropical regions, while the cultivation of citrus is not yet clarified and is not found anywhere in the wild. Thus, sweet orange is believed to have originated in south-east Asia, mandarin orange in the Philippines, citron, lemon, as well as orange in India, where pomпельmus originated in the Zond Islands (Arutyunova, 1938: 35).

It is believed that citrus was culturally cultivated between five and eight thousand years ago.

In the cultivation of citrus in Azerbaijan during the first century B.C. Feofrast and Strabo reported, and more information about these plants is found in the X-XI centuries.

The Citrus was most likely brought in by Arab travelers and merchants, or by Indian firemen who worshiped the fire (Borkhsenius, 1950: 226).

Changes in climatic conditions have led to the restriction of the area of citrus in the territory of our republic and their survival in more suitable climatic conditions (the Black Sea and Caspian Sea coastal regions of the Caucasus) in small or large quantities (Biradar, Jagginavar, 2005).

The issue of the effective use of climate resources in agricultural production is one of the important tasks set in place to solve the food problem. Implementing it requires an in-depth study of the characteristics of the areas, uncovering potential opportunities that make agriculture more efficient and faster to grow. Depending on environmental conditions, disease incubation time lasts 3-8 days. Lack of potassium in the soil also strengthens disease progression.

In general, Azerbaijan is a mountainous country. Therefore, it is of great scientific and practical importance to study the distribution of natural factors depending on space-time distribution, quantitative relations of individual elements of climate, height of agro-climatic indicators, inlet relief conditions, and exposure of slopes.

The proper study of increasing the population's food security has recently been adopted. The measures taken to implement the state programs and produce exportable products in the agricultural sector are customary in our republic and play a great role in the development of all the agricultural sectors. In this regard, regions and districts have created a very great basis for the juggling of the employment work of the population and to ensure that the level of poverty does not fall.

It should be noted that the cultivation of citrus fruit crops in agriculture is necessary for the development of citrus crops in the country's Lankaran-Astara southern region because the temperature and natural climatic conditions of the country properly exist in the traditions of such areas in the interest of economic efficiency and high potential of the exported product (Mustafayeva, 2014:98).

Much of the loss of rural crop worldwide is caused by the activity of insect and pest organisms. It is advisable to fight pests and organisms and apply more efficient chemical preparations against them (Valitov, Valitov Reactive, 2013).

Building the knowledge and skills of rural farm crops to understand the fundamentals of methods for chemical treatment and management of pesticides against the spread of diseases and pests.

Conclusion

How many species of pests have been found in citrus orchards in the Lankaran-Astara economic southern regio. Citrus whitefly, *Ceroplastes japonicus* Green, *Pseudococcus Gahana* Greeth, *Chrysomphalus distyospermi* Morg. have been determined.

More fruit trees were confined to Citrus whiteflies, and the percentage of damage to plants was found to be an average of 16%. Studies showed that the secretion of leaves with the common pest of Citrus whitefly was 15.0%.

As such, it accounts for 0.14% of citrus production in the world and 0.6% of production in Asian countries.

Citrus production in other countries is slightly more than 35,000 tons. This world accounts for 0.14% of citrus production and 0.6% of production in Asian countries. This is a major reason why the climate is inconvenient to cultivate citrus ones. However, with the cultivation of citrus in covered areas, recent work has shown that there are extensive and inexhaustible opportunities in southern regions to increase citrus production. The cultivation of citrus in covered areas and the enhancement of these areas is a matter of their ecological requirements. In open conditions in our country, only mandarin cultivation can be considered economically viable. The remaining breeds are often harmed by the inconvenient effects of foreign environmental scarring. Conducted studies have shown that the efficiency of citrus in several regions and covered areas has been determined with extensive experiments.

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Received: 27.03.2024

Accepted: 01.05.2024