

SCIENTIFIC NOTES

A NEW PEST: *CONTARINIA PRUNIFLORUM* COUTIN & RAMBIER (DIPTERA: CECIDOMYIIDAE) ON APRICOT (*PRUNUS ARMENIACA*) IN MALATYA PROVINCE, TURKEY**Mehmet Kaplan***

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In this study, were determined in buds and flowers on apricot trees in the harmful new specimen *Contarinia pruniflorum* Coutin & Rambier (Diptera: Cecidomyiidae) in Malatya province. The species that create significant losses in the early period at Battalgazi and the Kale district with the Lake basin flights in the fields of apricots between January-March. It was determined that laid to leaving 20-30 eggs on the flower buds.

Apricot which can be processed into many different products and besides being a tasty fruit is a fruit with a very high nutritional value. It also needs both production and marketing stage with the use of labor intensive to create large employment opportunities, Due to a significant increase in foreign income; it is in ranks second fruit in our country after raisins (Olgun, 2001).

Malatya province where situated in Eastern Anatolia Region, access 54.8% of country's assets apricot tree. 100 - 110 thousand tons of dried apricots are obtained from about 8 million apricot trees in Malatya. Approximately 55% of Turkey's apricot production and 85% of the production of dried apricots is produced in the province of Malatya (Anonymous, 2011).

In studies conducted in the fields of apricots in Malatya province, there are many factors affecting adversely the yield and quality In terms of plant protection.

In the studt were identified 41 species of insect pests a surveys study for the determination of pests In Malatya province apricots (Ulusoy et al., 2001).

At the beginning of intense complaints from apricot producer in recent years is to determine the pests, causing significant losses in yield apricots feeding apricot flowers and had been intended whereas the methods to be used in the fight to reveal.

This study area was carried out in Malatya province apricots areas in 2009-2014 and *Contarinia pruniflorum* Coutin & Rambier (Diptera: Cecidomyiidae) was determined as a new pest species.

MATERIALS AND METHODS

The main material of study had consisted of in the province of Malatya apricot orchards, Japanese umbrella, sweep net and various laboratory equipments.

This study was conducted in order to determine the type of pests that cause significant yield losses, by feeding in the flower buds in apricot orchards Battalgazi and Kale district of Malatya Province in 2009-2014 years. The survey were made weekly from in February and up to the second week of April. It were

sent abroad to be diagnosed by relevant specialists adults obtained as well as pests in the flower buds of the larvae in surveying.

RESULTS AND DISCUSSION

Pest species was determined to be *Contarinia pruniflorum* Coutin & Rambier (Diptera: Cecidomyiidae) that cause significant yield losses, by feeding in the flower buds in apricot orchards Battalgazi and Kale district of Malatya province. This pest has been identified for the first time apricot areas of our country through this work. Between the months of February and March of this type is seen in nature.

This species was reared and described on the basis of adults reared from swollen flower buds of *Prunus spinosa* and *Prunus mahaleb* in France (Western Europe) by Coutin & Rambier in 1955.

Later this species was found on *Prunus domestica* and other species of the genus *Prunus*. Subsequently important damage on *Prunus armeniaca* was observed 1999-2001 by E. Pierre in Department Drome in southern France (Pierre & Chauvin-Buthaut, 2001; Skuhravá et al., 2005).

It has been reported galled flower buds of *Prunus spinosa* caused by *Contarinia pruniflorum* also in the Czech Republic and in Slovakia at several places). The gall midges *Contarinia pruniflorum* may develop on several species of *Prunus*. Wild trees of this genus growing in nature may serve as fundamental host plants and source of expanding of gall midges in surroundings. Females emerging from these wild plants may lay their eggs also on developing flower buds of other related species of *Prunus* when environmental conditions are suitable. The population of gall midges may grow up several years gradually but inobservable up to the situation when damage of agricultural trees is large and gall midges cause serious loss of yield (Skuhravá, 1991, 1994).

In these studies; In parallel with the above-specified working It has been reported that the first output of adult nature had been begun after the second week of February and mated approximately 7-10 day period and left between 20-30 eggs on the flower buds. Larvae from eggs laid after feeding in the flower buds 15-20 days, As the larvae mature throw themselves to the ground. Pest species; pupae in the soil becomes, next year give back to nature is determined that the adult offspring of a year.

The fight against determined in this pest species to be made in the coming years will constitute the basic data for the project. The fight which will be held for against harmful pest in the framework of integrated will have a positive effect in terms of both human and environmental health.

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LITERATURE CITED

- Anonymous.** 2011. Agricultural Structure and Production. Priemership D. İ. E., Ankara.
- Olgun, A.** 2001. Increasing Domestic Consumption of Apricots Facilities. Apricot Symposium, Malatya.
- Pierre, E. & Chauvin-Buthaut, B.** 2001. A New Pest in the South of France: A Midge which gives cause for concern on Apricot Blossom. Phytoma, (541): 38-39.

Skuhrová, M. 1991. Gallmücken der Slowakei (Cecidomyiidae, Diptera). VI. Die Zoogeographie der Gallmücken. Zborník Slovenského Národného Múzea, Prírodne Vedy, Bratislava, 37: 85-178.

Skuhrová, M. 1994. The Zoogeography of Gall Midges (Cecidomyiidae, Diptera) of the Czech Republic. I. Evaluation of the Faunistic Researches in 1855–1990 periods. Acta Societatis Zoologicae Bohemicae, 57 [1993]: 211-293.

Skuhrová, M. & Skuhrový, V. 2005. Does the Gall Midge *Obolodiplosis robiniae* occur in England. Cecidology, 20: 34-35.

Ulusoy, R., Erkalıç, L., Öztürk, N., Ölmez, S. & Uygun, N. 2001. Apricot Pests and Fighting. Apricot Symposium, Malatya.



Figure 1. *Contarinia pruniflorum* Coutin & Rambier.