

Radosav Sekulić  
Tatjana Kereši  
Dragan Vajgand  
Poljoprivredni fakultet, Novi Sad

## MASOVNA POJAVA PAMUKOVE SOVICE (HELICOVERPA ARMIGERA HBN.) U VOJVODINI

Pamukova sovica ili, kako je Italijani nazivaju, žuta kukuruzna sovica, do sada je više puta u pojedinačnim primercima ili u veoma niskim populacijama registrovana i u kontinentalnim delovima naše zemlje. U mediteranskim područjima bivše Jugoslavije, naročito u Makedoniji, ova vrsta se češće masovno javljala, pričinjavajući ekonomski značajne štete na duvanu, kukuruzu i drugim biljnim vrstama. Ona poseduje veliki areal rasprostranjenja i uglavnom je više prisutna u toplijim reonima naše planete, izuzev Južne i Severne Amerike. Sreće se u Južnoj Evropi, velikom delu Afrike, na Bliskom i Dalekom Istoku, u Indiji, srednjoj i jugoistočnoj Aziji do Japana, na Filipinima, u Indoneziji, Novoj Gvineji, istočnom delu Australije i na Novom Zelandu (Kranz i dr., 1979).

Pripada izrazito migratornim vrstama i u pojedinim povoljnim godinama masovno leti iz područja Mediterana na sever, sve do Skandinavije, gde se u toplijim i suvljim reonima uspešno razmnožava i razvija pričinjavajući štete gajenim biljkama (Forster i Wohlfahrt, 1971).

Leptiri u rasponu krila mere oko 40 mm. Njihova boja varira od prljavo žute ili maslinasto sive do mrke. Zadnji par krila je uvek svetlige obojen. »Sovičine pege« na prednjem paru krila nisu jako izražene. Kao i kod većine vrsta iz familije sovica, leptiri su aktivni tokom noći, dok se preko dana teško uočavaju.

Jaja su 0,4 do 0,5 mm u prečniku, kruškastog oblika, sa spljoštenim bazalnim delom. Sveže položena su sjajno-žuto bela, a pre piljenja larava postaju tamnosmeda. Pod binokularom, na površini jajeta se uočavaju 24 radikalna rebra, kod kojih je svako drugo skraćeno. Između rebara nalaze se mnogobrojne poprečne brazde.

Gusenice narastu do 40 mm i u toku razvića prolaze kroz 6 uzrastnih stupnjeva. Njihova boja takođe veoma varira, između skoro crne, smeđe ili zelene do bleđe žute ili ružičaste (sl.1.). Na lednoj strani gusenica je veoma uočljiva sivozelena linija. Stigme su crne boje, a trbušna strana tela je žuta. Glava je manja i mrkožuto obojena. Lutka je takođe mrkožuta i nalazi se u zemljištu.

### Bioekologija i štetnost

Na množenje i razviće ove vrste povoljno deluju više temperature i padavine s proleća, te visoke temperature tokom leta. Optimalna temperatura razvića iznosi čitavih 22-28°C (Čamprag, 1994). Tokom 1993., a naročito tokom 1994.g., zapažena je primetna pojava nama malo poznatih gusenica na svili i vrhovima klipa kukuruza. Slična pojava uočena je i na drugim biljnim vrstama, naročito na duvanu, gde su gusenice oštećivale lišće i generativne organe.\* Daljim uzgojem u laboratoriji dobijena su imaga, koja su determinisana kao pamukova sovica. Zahvaljujući veoma visokim temperaturama, naročito u vegetaciji 1994.g. (povećanje srednje mesečnih temperatura u odnosu na višegodišnji prosek iznosilo je u nekim mesecima i preko 4°C), ova vrsta se iz svojih autohtonih areala proširila i na kontinentalne delove naše zemlje, gde je dalje nastavila razmnožavanje i razviće. Slična pojava je verovatno zahvatila i druge zemlje srednje Evrope.

Prateći sezonsku fluktuaciju brojnosti imaga pomoću lovne lampe u reonu Sombora 1994.g. utvrđeno je skoro potpuno slaganje dinamike brojnosti sa podacima za županiju Fejer u Mađarskoj (graf. 1. i 2.). Prva pojava imaga u reonu Sombora zabeležena je početkom juna, a maksimum aktivnosti je registrovan u drugoj polovini avgusta i prvoj dekadi septembra. Pojedini leptiri sretani su sve do početka

\* Oštećene biljne delove duvana i inekatski materijal dostavio nam je dr J. Berenji, na čemu mu se najljubaznije zahvaljujemo.

## **VIROSES OF MAIZE - CIRCUMSTANCES OF THEIR OCCURRENCES (Dragica Ivanović, 385-387)**

The most distributed virosis of maize is caused by maize dwarf mosaic virus (MDMV). Recently, another virosis, caused by barley yellow dwarf virus (BYDV), was described on this plant. MDMV causes mosaic on the youngest leaves, chlorosis, stunting and very often sterility. The time of the occurrence of this virosis in the crop depends on the time of the appearance of leaf aphids and they are in a positive correlation. BYDV is another aphid transmitted virosis of maize and appears as leaf purpling on lower, elder leaves and spreads acropetally from the leaf tip. BYDV are parasites of the phloem and they cause a much stronger pathological effect on plant than MDMV. Strong, early occurrence of MDMV could be expected after warm winter and dry spring. The later occurrence during the growing season is caused by the number of rainy days in March and April as well as by the sum of precipitation during these two months. Maize crops planted later are always stronger infected with MDMV, hence, each postponed planting date increases infection of maize by 2-3%. Growth of resistant genotypes of maize is recommended as the principal virus control in maize.

## **THE FLIGHT MONITORING OF THE EUROPEAN CORN BORER MOTHS OSTRINIA NUBLALIS HBN. ON LIGHT TRAP IN ZEMUN POLJE AND LEVEL OF THE ATTACKED PLANTS IN 1989 - 1994 (Bača F., 388-391)**

The flight monitoring of the European corn borer on light trap in Zemun Polje has been performed continuously in Maize Research Institute since 1966. The results obtained are used for the determination of the time of laying the egg masses and appropriate time of plants inspection in the field; the best time is a week after equalization of the sexes. The forecasting services gives also information about this. Level of attacked plants in the field which depends to a large extent on the weather conditions, temperature and moisture during the growing season, is not always in accordance with the number of the moths registered on the light trap.

## **MASS OCCURRENCE OF COTTON MOTH (HELICOVERPA ARMIGERA HBN.) IN VOJVODINA (R. Sekulić, Tatjana Kereši, D. Vajgand, 392-396)**

The individual samples of imago of this migration pest in the continental part of our country have been found in the previous years as well. However, thanks to the very high temperatures, especially during the growing season, mass occurrence of cotton moth on a wide territory of Vojvodina was registered in 1994. The first imago on capture lamps was recorded in early June while the maximum was registered in the second half of August and in the first decade of September. Some individual moths were found even up to the early of October. The caterpillars caused remarkable injuries on different cultivated and weed plants, especially on corn and tobacco plants, attacking primarily the generative organs. Their highest number was met from the second half of July till the end of September. The percentage of the attacked and damaged corn plants by this pest varied from 13 to 73% or 33% in average, depending on the locality. Chemical measures of control were not performed.

## **THE OCCURRENCE OF HELICOVERPA ARMIGERA IN THE NEIGHBOURING COUNTRIES IN THE SECOND HALF OF THE 20TH CENTURY (D. Čamrag, 396-401)**

This species is distributed in the southern Europe. The moths from the Mediterranean region migrate temporary to the region of the middle Europe. In this paper we have presented the occurrence and harmful effect of *H. armigera* in Romania, Hungary, Bulgaria and Macedonia in the second half of the 20th century. According to the incomplete data, in Romania the harmful effect was recorded every year in the