

**MNOŽIČNI POJAVI VRSTE *Helicoverpa armigera* Hb. V ZADNJEM OBDOBJU
V SLOVENIJI**Stanislav GOMBOC¹, Davorin VRHOVNIK²¹ Ministrstvo za kmetijstvo, gozdarstvo in prehrano, Fitosanitarna uprava Republike Slovenije² Unihop d.o.o.**IZVLEČEK**

Sovka *H. armigera* Hb. je v Sloveniji predvsem preletna vrsta, ki v naše kraje prileti iz Sredozemlja, predvsem iz Balkana in Male Azije. Selitev vrste vzpodbujajo visoke temperature in pomanjkanje hrane, zato je v vročih letih številčnost vrste pri nas veliko večja kot v zmerno toplih letih. *H. armigera* je gospodarsko zelo pomembna vrsta, najdemo jo celo na karantenskih seznamih EU in EPPO. Gosenice so polifagne. Hranijo se na številnih zelnatih in celo drevesnih vrstah rastlin, najraje pa na rastlinah z debelim strženom (koruza, sončnica, bombaž), plodovkah (paradižnik, paprika) in stročnicah, kjer gosenice zlahka vrtajo rove v mehke dele rastlin. Gospodarska škoda je v intenzivni proizvodnji zelenjave, okrasnih rastlin in v zavarovanih prostorih, lahko zelo velika. Nastopi že v kratkem obdobju, saj gosenice zelo hitro rastejo, varstveni ukrepi pa so zaradi omejitev v aplikaciji insekticidov (vsakodnevno obiranje pridelka) in življenja gosenic v strženu ali plodovih največkrat neučinkoviti. Najbolje se obnesejo: fumigacija, agrotehnični ukrepi in parazitoidi jajčec. V Sloveniji še nedolgo tega s *H. armigera* nismo imeli težav. Prve množične najdbe gosenic smo zabeležili v vročinskih obdobjih v letih 2000 in 2003. Najdbe gosenic na gojenih rastlinah pa so se začele od leta 1999, tako v rastlinjakih, kot na prostem. Pred tem letom s *H. armigera* nismo imeli večjih težav, beležili smo le posamične najdbe metuljev na svetlobne pasti. Prve večje škode smo ugotovili v letu 2000, v glavnem na plodovih paradižnika in paprike v fazi zorenja ter na storžih korusi v fazi mlečne zrelosti, na območju Vipavske doline. Gosenice smo v tem letu našli tudi na hmelju, krizantemah, lucerni, fižolu in na nekaterih debelostebelnih plevelih. V letu 2003 je vročinsko obdobje nastopilo že konec maja in je trajalo vse do jeseni. Že v juniju smo ugotovili prelete migratornih vrst, ki se v Sloveniji pojavijo zelo redko, med temi je bila številčna tudi vrsta *H. armigera*. Leta 2003 smo zabeležili veliko gospodarsko škodo v območjih preletnih smeri, ki čez Slovenijo vodijo v smeri večjih porečij (Drava – Mura, Sava) in v mediteranski smeri – Primorje in Vipavska dolina. Največ škoda je bilo na paradižniku in papriki, tako na prostem kot v rastlinjakih ter na hmelju in korusi. Območja, kjer smo zabeležili škodo pa so bila: Podravje, Posavje, vsa SV Slovenija, Gorenjska in Vipavska dolina. Vrsto *H. armigera* s svetlobnimi vabami v Sloveniji spremljamo že vrsto let. Najbolj natančno pa smo jo spremljali v hmeljiščih v Radljah ob Dravi. Od leta 1999 se je število zabeleženih osebkov na svetlobnih vabah konstantno povečevalo. Najštevilčnejši pa je bil nalet metuljev v letih 2000 in 2003.

Ključne besede: *Helicoverpa armigera* Hb., Noctuidae, gospodarka škoda, Slovenija, bionomija, paradižnik, paprika, hmelj, korusa, svetlobne vabe, monitoring

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ABSTRACT

MASS OCCURRENCE OF THE SPECIES *Helicoverpa armigera* Hb. IN THE RECENT PERIOD IN SLOVENIA

Cotton bollworm (*H. armigera* Hb.) is a species, which flies to Slovenia from the Mediterranean, in particular from the Balkan Peninsula and Asia Minor. Migrations are encouraged by high temperatures and lack of food, therefore in hot years the number of representatives of the species in our country is much bigger than in years of moderate temperatures. *H. armigera* is a species of significant economic importance and may be found even on quarantine lists of the EU and EPPO. Caterpillars are polyphagous. They feed on a number of herbaceous species and even on tree species, however they prefer plants with thick pith (maize, sunflower, cotton), fruiting vegetables (tomato, paprika) and leguminous plants, enabling caterpillars to easily bore holes into soft parts of plants. Intensive production of vegetables, ornamental plants and production in greenhouses may thus suffer great economic loss. Such loss occurs within a rather short period of time, since caterpillars grow quickly and protective measures usually fail due to limitations imposed on the application of insecticides (every-day harvesting) and caterpillars living in pith or fruits. As the most effective proved: fumigation, agrotechnical measures and egg parasitoids. Not long ago *H. armigera* represented no problem in Slovenia. First mass findings of caterpillars were recorded in the periods of high temperatures in 2000 and 2003. In the years prior to 2000 *H. armigera* had caused no significant damage, only individual butterflies could be caught by light traps. First significant damages were recorded in 2000, most of all on tomato and paprika fruits in the ripening phase and on corncobs in Vipava Valley in the phase of lactic maturity. In that year caterpillars could be found also on hops, chrysanthemus, lucerne, beans and some thick-stem weeds. In 2003 the period of high temperatures started already at the end of May, to end only in autumn. In June over-flights of migratory species, the occurrence of which in Slovenia is rare, were recorded, including a significant number of representatives of the species *H. armigera*. In 2003 significant economic loss was recorded within the areas of flight directions across Slovenia towards bigger river basins (Drava – Mura, Sava) and in Mediterranean direction – Primorje and Vipava Valley. The most significant loss was suffered by tomato and pepper, both in the field and in greenhouses, as well as hops and maize. The loss was recorded in the following areas: the Drava region, the Posavje region, the whole northeast Slovenia, the Upper Carniola and the Vipava Valley. In Slovenia monitoring of the species *H. armigera* with light traps has been taking place already for a long time. The monitoring has been the most precise in fields of hops in Radlje ob Dravi. From 1999, the number of recorded subjects has been constantly increasing. However the flight of butterflies was the most intensive in 2000 and 2003.

Key words: Cotton bollworm, *Helicoverpa armigera* Hb., Noctuidae, economic loss, Slovenia, bionomy, tomato, pepper, hops, maize, light traps, monitorin