

***Helicoverpa gelotopoeon* (Lepidoptera: Noctuidae)**

This short description has been prepared in the framework of the EPPO Study on Pest Risks Associated with the Import of Tomato Fruit. The whole study can be retrieved from the EPPO website.

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Africa	Asia	Oceania	North America	South-Central America and Caribbean
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***Helicoverpa gelotopoeon* (Lepidoptera: Noctuidae) (oruga bolillera, lagarta bolillera, isoca bolillera)**

Why	Identified in the EPPO tomato study. <i>H. gelotopoeon</i> is polyphagous, including on tomato, and has gained importance especially on soybean in the 2000s (Perotti et al., 2008).
Where	EPPO region: absent South America: Argentina (Mazza et al., 2007), Uruguay (Biezanko et al., 1974), Brazil (Specht et al., 2005), Paraguay (Czepak et al., 2013), Chile (Cork and Lobos, 2003). Czepak et al. (2013), reporting the first finding of <i>H. armigera</i> in Brazil, note that <i>H. gelotopoeon</i> and <i>H. armigera</i> are externally similar, and cause similar damage, and recommend that specimen from Argentina be examined. However, Argentinian authors reporting on recent serious damage on soybean mention <i>H. gelotopoeon</i> .
Climatic similarity	Medium-high. 9 common climates considering the countries listed above, but probably lower (as it probably does not occur in all areas). The pest distribution within these countries is not known in details, but it is known to occur and to be a serious pest in the provinces of Cordoba (Avalos et al., 2010), Santa Fe (Perotti et al., 2012) and Santiago del Estero (Cork and Lobos, 2003) in Argentina, which seem to have a climate type (Cfa) similar to that in for example northern Italy or part of the Balkans.
On which plants	Tomato, cotton, maize, alfalfa (<i>Medicago sativa</i>), "line" (flax?), beans, soybean, sunflower, weed <i>Physalis angulata</i> (Cork and Lobos, 2003, citing others); also in other publications: soybean (SENASA, 2010), <i>Helianthus debilis</i> , <i>Pisum sativum</i> , <i>Allium cepa</i> , <i>Linum usitatissimum</i> (Specht et al., 2004), cotton (Mazza et al., 2007), <i>Cicer arietinum</i> (chickpea) (Fichetti et al., 2009; Avalos et al., 2010).
Damage	Eggs on leaves, larvae on plants, pupae in soil. Damage is done by larvae feeding on leaves, pods and seeds (chickpea - Avalos et al., 2010). Larvae first may feed on the tender parts of buds and bind them with silk. Then they attack leaves and tender shoots. They may cut seedlings, cut stems above the cotyledons, defoliate plants, attack flower, pods, grain, leaves, buds, etc. (SENASA, 2010; Alvarez and Abbate, 2013). The pest feeds on seeds and attacks capsules of flax and cotton and soja pods (Alvarez and Abbate, 2013). On soybean, the major damage is done by mature larval stages feeding on grain (one larva can consume 15 grains) (Alvarez and Abbate, 2013). In the North of Argentina, it was originally considered as a sporadic pest of soybean, and damage was observed where other oleaginous crops were grown, favouring the maintenance of populations; however, it has been causing serious damage to soybean from the end of the 2000s (Alvarez and Abbate, 2013; Perotti et al., 2012). No details was found on damage on tomato (although Cork and Lobos, 2003 conduct their trapping experiments in tomato and cotton fields), but <i>Helicoverpa/Heliothis</i> generally feed on fruit too and <i>H. gelotopoeon</i> attacks seeds. On cotton in Argentina, <i>H. gelotopoeon</i> and <i>Heliothis virescens</i> form a bollworm complex (Cork and Lobos, 2003).
Dissemination Pathway	Adults fly. No further details were found.
Possible risks	Plants for planting, fruits?, vegetables?, pods, capsules of host plants, soil, from countries where <i>H. gelotopoeon</i> occurs.
Categorization	Most host plants are major crops in the EPPO region. The climatic similarity according to the EPPO Study between the area where it occurs and the EPPO region is medium-high.
Sources	Presumed to be a quarantine pest for Korea Rep. 2011 (which lists " <i>Heliothis gelotopoeon</i> ") Álvarez D, Abbate S. 2013. Nuevos problemas de plagas en soja: <i>Helicoverpa gelotopoeon</i> (lagarta bolillera) http://webcache.googleusercontent.com/search?q=cache:http://www.lares-srl.com/descargas/prensa/IsocaBolillera2013.pdf Avalos S, Mazzuferi V, Fichetti P, Berta C, Carreras J. 2010. Entomofauna asociada a garbanzo en el noroeste de Córdoba (Argentina). <i>Horticultura Argentina</i> 29(70): Sep.-Dic. 2010 Biezanko CM, de Ruffinelli A, Link D. 1974. Plantas y otras sustancias alimenticias de las orugas de los lepidópteros uruguayos. <i>Rev. Centro Ciencias Rurales, Santa María</i> , 4(2): 107-148.

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