

Spodoptera ornithogalli (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.

EPPO (2015) EPPO Technical Document No. 1068, EPPO Study on Pest Risks Associated with the Import of Tomato Fruit. EPPO Paris [\[link\]](#)

Africa	Asia	Oceania	North America	South-Central America and Caribbean
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***Spodoptera ornithogalli* (Lepidoptera: Noctuidae) (yellow-striped armyworm)**

Why	Identified in the EPPO tomato study. This pest is highly polyphagous on a wide range of field and vegetable crops.
Where	<p>EPPO region: Absent. CABI CPC includes a record for Denmark, considered here as doubtful (according to web, this record originates from Karsholt (1994) and Karsholt & Nielsen (2013), but <i>S. ornithogalli</i> is considered as not established on the site http://allearter-databasen.dk/index.php?taksonomi=Spodoptera+ornithogalli)</p> <p>North America: Canada, USA (East to Rocky mountains (north to southern Canada), and all southern USA, incl. California – Capinera, 2005), Mexico (King and Saunders, 1984; Bugguide, 2009, Troubridge and Lafontaine, ND)</p> <p>Central America: Honduras? (CABI CPC) Nicaragua, Guatemala, Costa Rica, Central America (King and Saunders, 1984) Mexico to Brazil (Bugguide, 2009)</p> <p>Caribbean: West Indies (Bugguide, 2009)</p> <p>South America: Brazil? (CABI CPC) Uruguay (Biezancko et al., 2007), Brazil (Bugguide, 2009)</p>
Climatic similarity	High. 13 common climates considering the countries listed above. However, in the USA it is considered to be a pest only in southern States, corresponding to a lower number of climates. It is not known if it also overwinters in the northern part of its distribution, or migrate northwards, as <i>S. praefica</i>
On which plants	Highly polyphagous on a wide range of plants, including tomato, <i>Allium</i> , <i>Arachis hypogaea</i> , Brassicaceae, <i>Capsicum annuum</i> , Cucurbitaceae, <i>Gossypium</i> , <i>Ipomoea batatas</i> , <i>Manihot esculenta</i> (cassava), <i>Oryza sativa</i> (rice), <i>Phaseolus</i> (beans), <i>Solanum tuberosum</i> , <i>Zea mays</i> (maize) (CABI CPC), also in Biezancko et al. (2007), asparagus, <i>Glycine max</i> , <i>Helianthus annuus</i> , <i>Linum usitatissimum</i> , <i>Medicago sativa</i> , <i>Nicotiana glauca</i> and <i>N. tabacum</i> , <i>Pisum sativum</i> , <i>Solanum melongena</i> . Beet, cabbage, cantaloupe, carrot, cucumber, lettuce, onion, pea, rhubarb, rutabaga, salsify, turnip, watermelon, blackberry, clover, grape, lentil, peach, rape, raspberry, sorghum, soybean, sugarbeet, sweet clover, sunflower, wheat, and several flower crops and weeds (Capinera, 2005).
Damage	Eggs are on leaves. Larvae feed on leaves, but also on fruit of plants such as tomato, pepper, cotton; pupae are in the soil (Bessin, ND; Capinera, 2005). <i>S. ornithogalli</i> is mentioned amongst major pest of economic importance for tomato for North America by Berlinger (1987). In the USA, it is a pest mostly in the southern States (Capinera, 2005). In Kentucky it is recorded as a pest on vegetables (including greens, tomatoes, peppers, beans, cucurbits, cole) as well as tobacco, soybean, maize, alfalfa.
Dissemination	Adults fly.
Pathway	Fruits and vegetables, plants for planting, cut flowers of host plants, soil, from countries where <i>S. ornithogalli</i> occurs.
Possible risks	<i>S. ornithogalli</i> has many hosts that 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 high (although its northern limit of overwintering is uncertain). To establish in the EPPO region, the pest would have to enter in an area where it can overwinter.
Categorization	Eastern Africa A1 2001, Southern Africa A1 2001 (from PQR); Quarantine pest for Guinea 2009 (for cotton, tomato), Japan 2011, Korea Rep 2011 (from the IPP)
Sources	<p>Berlinger MJ. 1987. Pests. pp 391-441 In The Tomato Crop, A scientific basis for improvement (eds Atherton JG and Rudich J). Chapman and Hall, London - New York.</p> <p>Biezancko CM, de Ruffinelli A, Link D. 1974. Plantas y otras sustancias alimenticias de las orugas de los lepidopteros uruguayos. Rev. Centro Ciencias Rurais, Santa Maria, 4(2): 107-148.</p> <p>CABI CPC. 2013</p> <p>Capinera JL. 2005. <i>Spodoptera ornithogalli</i> (Guenée). Featured creatures. University of Florida. http://entnemdept.ufl.edu/creatures/veg/leaf/yellowstriped_armyworm.htm (Accessed January 2014)</p>

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