

Table Published records insect species infesting stored hazel nuts.

Insect species	Commodity	Category	Source
<i>Ahasverus advena</i>	hazel nut	n	Altunc & Guncan. 2026
<i>Alphitophagus bifasciatus</i>	hazel nut	n	Altunc & Guncan. 2026
<i>Aphomia gularis</i>	hazel nut	n	Alkan 1959, Smith 1956, Yasan & Kiper 1972
<i>Blattisocius tarsalis</i>	hazel nut	n	Altunc & Guncan. 2026
<i>Cadra calidella</i>	hazel nut	n	Hagstrum et al. 2013
<i>Cadra cautella</i>	hazel nut	n	Alkan 1959, Altunc & Guncan 2026, Ozman-Sullivan et al. 2009, Yasan & Kiper 1972
<i>Carpophilus dimidiatus</i>	hazel nut	n	Altunc & Guncan 2026, Hagstrum et al. 2013
<i>Cryptolestes ferrugineus</i>	hazel nut	n	Altunc & Guncan 2026
<i>Cryptolestes turcicus</i>	hazel nut	n	Altunc & Guncan 2026
<i>Dermestes lardarius</i>	hazel nut	n	Altunc & Guncan 2026, Klass 2009
<i>Dermestes maculatus</i>	hazel nut	n	Hagstrum et al. 2013
<i>Ephestia elutella</i>	hazel nut	n	Alkan 1959
<i>Ephestia kuehniella</i>	hazel nut	n	Alkan 1959
<i>Habrobracon hebetor</i>	hazel nut	n	Altunc & Guncan 2026, Ozman-Sullivan et al. 2009, Yasan & Kiper 1972
<i>Lasioderma serricorne</i>	hazel nut	n	Khalifa & Sayeda 2009
<i>Litargus balteatus</i>	hazel nut	n	Altunc & Guncan 2026
<i>Nemapogon granella</i>	hazel nut	n	Altunc & Guncan 2026, Hagstrum et al. 2013
<i>Oryzaephilus mercator</i>	hazel nut	n	Altunc & Guncan 2026, Ozman-Sullivan et al. 2009
<i>Oryzaephilus surinamensis</i>	hazel nut	n	Alkan 1959, Altunc & Guncan 2026,

			Hagstrum et al. 2013, Khalifa & Sayeda 2009
<i>Palorus subdepressus</i>	hazel nut	n	Altunc & Guncan 2026
<i>Plodia interpunctella</i>	hazel nut	n	Alkan 1959, Altunc & Guncan 2026, Hagstrum et al. 2013, Karabörklü & Altın 2018, Khalifa & Sayeda 2009, Ozman-Sullivan et al. 2009, Yasan & Kiper 1972
<i>Pyralis farinalis</i>	hazel nut	n	Altunc & Guncan 2026
<i>Rhyzopertha dominica</i>	hazel nut	n	Alkan 1959, Karabörklü & Altın 2018
<i>Stegobium paniceum</i>	hazel nut	n	Altunc & Guncan 2026
<i>Tenebroides mauritanicus</i>	hazel nut	n	Altunc & Guncan 2026, Hagstrum et al. 2013
<i>Tenebrio molitor</i>	hazel nut	n	Altunc & Guncan 2026
<i>Tribolium castaneum</i>	hazel nut	n	Alkan 1959, Altunc & Guncan 2026, Hagstrum et al. 2013, Khalifa & Sayeda 2009, Ozman-Sullivan et al. 2009
<i>Tribolium confusum</i>	hazel nut	n	Alkan 1959, Altunc & Guncan 2026, Ozman-Sullivan et al. 2009
<i>Tribolium destructor</i>	hazel nut	n	Hagstrum et al. 2013
<i>Typhaea stercorea</i>	hazel nut	n	Altunc & Guncan 2026
<i>Venturia canescens</i>	hazel nut	n	Altunc & Guncan 2026

References:

Alkan, Bekir. 1959. Haselnußschädlinge in der Türkei (Hazelnut pests in Turkey). Zeitschrift für Angewandte Entomologie 44(2): 187-202. <https://doi.org/10.1111/j.1439-0418.1959.tb00921.x> (*Aphomia* (= *Paralipsa*) *gularis*, *Cadra cautella*, *Ephestia elutella*, *Ephestia kuehniella*, *Oryzaephilus surinamensis*, *Plodia interpunctella*, *Rhyzopertha dominica*, *Tribolium castaneum*, *Tribolium castaneum*)

Altunc, Yunus Emre, and Ali Guncan. 2026. Storage-Associated Insect Communities in Hazelnuts: Species, Diversity Patterns, and Ecological Implications. Journal of Economic Entomology 119(2): 1446–1456 <https://doi.org/10.1093/jee/toag052> (*Cadra cautella*, *Carpophilus dimidiatus*, *Habrobracon hebetor*, *Oryzaephilus mercator*, *Plodia interpunctella*, *Tribolium castaneum*, *Tribolium confusum* were most abundant, *Blattisocius tarsalis*,

Nemapogon granella, *Oryzaephilus surinamensis*, *Pyrallis farinalis*, *Tenebroides mauritanicus*, *Venturia canescens* were less abundant and *Ahasverus advena*, *Alphitophagus bifasciatus*, *Cryptolestes ferrugineus*, *Cryptolestes turcicus*, *Dermestes lardarius*, *Litargus balteatus*, *Palorus subdepressus*, *Stegobium paniceum*, *Tenebrio molitor*, and *Typhaea stercorea* were reported for first time from industrial facilities (94), merchants/traders (69), or producer storage units (11) in the districts of three provinces in Ordu, Giresun, and Trabzon regions of Turkey.)

Hagstrum, D. W., T. Z. Klejdysz, Bh. Subramanyam and J. Nawrot. 2013. Atlas of Stored-Product Insects and Mites. AACC International, St. Paul, Minnesota. (Give previously published infestation records for *Cadra calidella*, *Carpophilus dimidiatus*, *Dermestes maculatus*, *Nemapogon granella*, *Oryzaephilus surinamensis*, *Plodia interpunctella*, *Tenebroides mauritanicus*, *Tribolium castaneum*, and *Tribolium destructor*)

Karabörklü S, and Altın N. 2018. Determination of insect pests and fungal pathogens in storages of hazelnut in Düzce province. Düzce Uni. J. Sci. & Tech. 6:860–870.

<https://doi.org/10.29130/dubited.371733> (*Plodia interpunctella*, *Rhyzopertha dominica*)

Khalifa E, and Sayeda A. 2009. Losses of hazelnuts by infestation of certain stored product insects in Egypt. J. Plant Prot. Pathol. 34: 8327–8333. (*Lasioderma serricorne*, *Oryzaephilus surinamensis*, *Plodia interpunctella*, *Tribolium castaneum*)

Klass C. 2009. Larder Beetle *Dermestes lardarius* L. The Pesticide Management Education Program (PMEP), New York State Department of Environmental Conservation. <https://tinyurl.com/mr69zz6h> (Accessed 5 January 2025).

Ozman-Sullivan SK, Ocal H, Celik N, and G. T. Sullivan 2009. Insect pests of stored hazelnuts in Samsun province, Turkey. Acta Horticulturae / Acta Hortic. 845: 515–520. <https://doi.org/10.17660/ActaHortic.2009.845.79> (*Bracon hebetor*, *Cadra cautella*, *Oryzaephilus mercator*, *Plodia interpunctella*, *Tribolium castaneum* and *Tribolium confusum*)

Smith, K. G. 1956. The occurrence and Distribution of *Aphomia gularis* Zell. Bulletin of Entomological Research 47(4): 655-667.

Yasan E, and Kiper G. 1972. Investigations on the biology, rate of damage and control of *Cadra cautella* Walk. and *Plodia interpunctella* Hbn. that cause the economic losses in the hazelnut stores in the east of Black Sea Region. Plant Prot. Res. Annu. 6:71–73. (*Aphomia* (= *Paralipsa*) *gularis*, *Habrobracon hebetor*)