

## Terrestrial invertebrate animals

### *Cameraria ohridella* (Deschka et Dimic, 1986) Horse-chestnut leaf miner



Photo: R. Tomov

**Native region (Continent):** Natural habitats of the horse chestnut (*Aesculus hippocastanum* L.) in the mountains of Albania, Greece and the Republic of North Macedonia (Western Balkans).

**First introduction, current status and distribution in Bulgaria:** It was first recorded in 1989 in the area of Kostinbrod near Sofia City. Currently, the species is widespread throughout the country within the range of the horse chestnut.

**Local status:** Established.

**Entry paths in the region of Pancharevo Lake (if known):** Natural distribution from neighbouring regions.

**Observations:** The species feeds mainly on the horse chestnut leaves. The caterpillar makes galleries in the mesophyll of the leaves forming spotted mines. There are isolated cases of species development on *Acer pseudoplatanus* L. and *A. platanoides* L.

***Cydalima perspectalis* (Walker, 1859)**  
**Box tree moth**



Photo: R. Tomov

**Native region (Continent):** East Asia.

**First introduction, current status and distribution in Bulgaria:** First reported in 2014. Currently the species is widespread throughout the country in urban areas.

**Local status:** Established.

**Entry paths in the region of Pancharevo Lake (if known):** Natural distribution from neighbouring regions.

**Observations:** The species feeds on the box tree (*Buxus* spp.). The young caterpillars make galleries in the mesophyll of the leaves, forming spotted mines, then skeletalising the leaves, and leaving only the epidermis. The adult larvae gnaw the leaves. In high numbers, the larvae also feed on young bark and are able to destroy the entire plant. Excrements and molting residues accumulate at the feeding sites.



***Harmonia axyridis* (Pallas, 1773)**  
**Multicoloured Asian lady beetle**



Photo: R. Tomov

**Native region (Continent):** East Asia.

**First introduction, current status and distribution in Bulgaria:** First reported in 2008 in the region of Sofia City. Currently the species is widespread throughout the country.

**Local status:** Established.

**Entry paths in the region of Pancharevo Lake (if known):** Natural distribution from neighbouring regions.

**Observations:** The species is polyphagous, but feeds mainly on aphids and could be found on various plants infested by the aphids. The ladybug prefers woody-shrub vegetation. Due to its wide polyphagia, inhabits natural, semi-natural, and anthropogenic habitats.

***Halyomorpha halys* (Stål, 1855)**  
**Brown marmorated stink bug**



Photo: R. Tomov

**Native region (Continent):** Eastern Asia.

**First introduction, current status and distribution in Bulgaria:** First reported in 2016. Currently the species is widespread throughout the country.

**Local status:** Established.

**Entry paths in the region of Pancharevo Lake (if known):** Natural distribution from neighbouring regions.

**Observations:** The species is polyphagous, feeding on a wide range of plants. It feeds on different parts of the plant but prefers the fruits.



***Nezara viridula* (Linnaeus, 1758)**  
**Southern green stink bug**



Photo: R. Tomov

**Native region (Continent):** North America.

**First introduction, current status and distribution in Bulgaria:** First reported in 1959. Currently the species is widespread throughout the country.

**Local status:** Established.

**Entry paths in the region of Pancharevo Lake (if known):** Natural distribution from neighbouring regions.

**Observations:** The species is polyphagous, feeding on a wide range of plants. It feeds on different parts of the plant but prefers the fruits.

***Obolodiplosis robiniae* (Haldeman, 1847)**  
**Black locust gall midge**



Photo: R. Tomov

**Native region (Continent):** North America.

**First introduction, current status and distribution in Bulgaria:** First recorded in 2009. Currently the species is widespread throughout the country within the range of the black locust (*Robinia pseudoacacia* L.).

**Local status:** Established.

**Entry paths in the region of Pancharevo Lake (if known):** Natural distribution from neighbouring regions.

**Observations:** The species feeds only on leaves of the black locust. The larva of the gall midge twists the edge of the simple petals downwards and develops into the shelter (gall) made in this way.

***Parectopa robiniella* Clemens, 1863**  
**Locust digitate leafminer**



Photo: R. Tomov

**Native region (Continent):** North America.

**First introduction, current status and distribution in Bulgaria:** First recorded in 1988 in North Bulgaria. Currently the species is widespread throughout the country within the range of the black locust (*Robinia pseudoacacia* L.).

**Local status:** Established.

**Entry paths in the region of Pancharevo Lake (if known):** Natural distribution from neighbouring regions.

**Observations:** The species feeds only on leaves of the black locust. The caterpillar makes galleries in the mesophyll of the leaves in the form of star mines on the upper side of the leaves.



***Phyllonorycter issikii* (Kumata, 1963)**  
**Lime leafminer**



Photo: R. Tomov

**Native region (Continent):** Asia.

**First introduction, current status and distribution in Bulgaria:** First recorded in 2006. Currently the species is widespread throughout the country within the range of the lime tree (*Tilia* spp.).

**Local status:** Established.

**Entry paths in the region of Pancharevo Lake (if known):** Natural distribution from neighbouring regions.

**Observations:** The caterpillar makes galleries in the mesophyll of the lime tree leaves in the form of spotted mines on the underside of the leaves. The upper part of the mine gradually swells upwards and the lower epidermis folds. On the upper side, the mine looks dotted with white dots.



***Phyllonorycter robiniella* (Clemens, 1859)**  
**Black locust tentiform leafminer**



Photo: R. Tomov

**Native region (Continent):** North America.

**First introduction, current status and distribution in Bulgaria:** First recorded in 2001 in Sofia City. Currently the species is widespread throughout the country within the range of the black locust (*Robinia pseudoacacia* L.).

**Local status:** Established.

**Entry paths in the region of Pancharevo Lake (if known):** Natural distribution from neighbouring regions.

**Observations:** The caterpillar makes galleries in the mesophyll of the black locust leaves in the form of spotted mines on the underside of the leaves. The upper part of the mine gradually swells upwards and the lower epidermis folds. On the upper side, the mine looks dotted with white dots.

**Author:** [Rumen Tomov](#)