

PEST ALERT

BROWN WINGED PLANT HOPPER

The Brown Winged Plant Hopper (BWP), *Pochazia shantungensis*, is an insect recently found in Georgia. It is native to China but has been introduced to several countries (France, Italy, Japan, Russia, South Korea, and Türkiye). South Korea has reported BWP to be a damaging fruit tree pest. At this time, we do not know the effect it will have on Georgia's agriculture. The purpose of this alert is to provide information to agriculture sectors and encourage reporting finds to the Georgia Department of Agriculture.

Host Plants:

BWP has been recorded on over 200 plant species from 81 plant families. Fruit trees like apple & peach (Fig. 1) and woody ornamentals are the preferred hosts, but shrubs, vines, and herbaceous plants are also host plants with different life stages using different plants. For more information see, planthealthportal.defra.gov.uk/assets/factsheets/Pochazia_Factsheet_Final_2025.pdf.

Description

Eggs (Fig. 3) are elongate, oval, with a cloudy white color, and are typically 0.8-1 mm in length. They are laid deep into the tissue in two rows, containing between 7 and 65 eggs (usually 20-30) in an alternating pattern, often described as a herringbone pattern, and covered with discarded plant tissue and white, fluffy wax deposits.



Egg masses on *Ligustrum lucidum*, covered with waxy filaments, with adults below (Courtesy: Erdem Hizal, Istanbul University-Cerrahpas  a (TR)).



A longitudinal, sagittal section in a twig showing that the eggs (red oval) are deeply inserted in the plant tissues (from Nam et al., 2020)   Magnolia Press



Figure 1
Apple tree, a preferred host of *Pochazia shantungensis*
  GA Dept. of Agriculture



Figure 2
nymph of brown winged plant hopper
  Chris Malumphy



Figure 3
The eggs of *Pochazia shantungensis* removed from egg-laying wound on Portuguese laurel



Figure 4
An egg-laying wound on *Elaeagnus* with viable eggs of *Pochazia shantungensis*



Figure 5
An egg-laying wound. Note how the wound doesn't extend beyond axils.



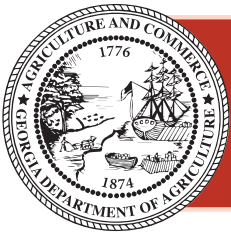
Figure 6
An adult *Pochazia shantungensis* female
  Marco de Haas



Figure 7
A 1st instar *Pochazia shantungensis* nymph (lateral view) with wax



Figure 8
A 5th instar *Pochazia shantungensis* nymph (laterodorsal view) with wax



PEST ALERT (CONTINUED) BROWN WINGED PLANT HOPPER

Nymphs (Figures 7 & 8)

Nymphs (Fig. 7 & 8). The nymphs have five growth stages (instars). Nymphs are typically white, with a waxy coating, and most instars have a prominent wax tail that they can move. The 5th instar (Fig. 7 & Fig. 8) is conspicuous, white with brown patches, a developed wax tail, and a distinct layout of 12 spots arranged symmetrically on the back. Its wing pads are brown to dark brown.

Adults (Figure 6)

Adults (Fig. 6) are generally brown to dark brown and about 8 mm long or with the tegmina, the length is closer to 12-14 mm. The forewings have a wing-span of 30 mm and have a distinct white spot on the outside edge of the wing.

Damage

This pest causes direct damage by sucking plant sap and by damaging young branches when females insert their eggs. It also indirectly induces the development of sooty mold on leaves as a result of honeydew secretion. For more information, visit https://www.eppo.int/ACTIVITIES/plant_quarantine/alert_list_insects/pochazia_shantungensis.



Figure 6

An adult *Pochazia shantungensis* female
© Marco de Haas



Top, Figure 7: A 1st instar nymph (lateral view) with wax **Bottom, Figure 8:** A 5th instar nymph (latero-dorsal view) with wax © Fera Science Ltd



Top: Image, Marco de Haas **Bottom:** *Pochazia shantungensis* male, habitus, ventral side; Thierry Bourgoin, Museum National d'Histoire Naturelle (FR)



The habitus of *Pochazia shantungensis*: **Top:** Dorsal view, Scale bar = 0.5 cm; **Bottom:** Lateral view (female) (photos by Anna Ágnes Somogyi)



Pochazia shantungensis, **Top:** a dry specimen, male, in dorsal view, and **Bottom:** a live specimen, in lateral view, 28 September 2022, Sochi, Russia (© N.N. Karpun)



Reporting

To report a suspected detection, email a photograph to pestid@agr.georgia.gov or contact your local county extension agent.