



SCIENTIFIC NOTES

A new host plant of the cotton seed bugs *Oxycarenus hyalinipennis* (COSTA), in Egypt

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Oxycarenus hyalinipennis (Costa) family Lygaeidae. These pests have host plants Primarily Malvaceae, especially cotton, okra (*Abelmoschus esculentus* (L.) Moench) and Hibiscus spp. Some fruit trees, avocado, apricot, dates, figs, and persimmon. It is native to southern Europe and North Africa. It can now be found in alot of countries *O. hyalinipennis* is a serious pest of cotton in Egypt, and of cotton and okra in Southeast Asia and Africa. nymphs cause damage by sucking oil from mature seeds, and stored cotton also be attacked. Additional damage may accrue during processing due to the lint becoming stained by crushed bugs.

The pest may damage fruit trees by inducing greasy spots, which is due to sucking and excreting toxic saliva, and by disfiguring fruits with its feces.

This paper recorded the presence of *O. hyalinipennis* as a new record on *Psidium guajava* in El Shatbi faculty farm -Alexandria, Egypt as a first record on this fruit tree.

Keywords

Cotton seeds bug, Hemiptera, *Oxycarenus hyalinipennis*. *Psidium*



Introduction

Oxycarenus hyalinipennis, common name cotton seed bug, is a species of plant bug belonging to the family Lygaeidae, subfamily Oxycareninae (Samy, 1969). The cotton seed bug *Oxycarenus hyalinipennis* (Costa) is a serious pest of cotton and other malvaceous plants. It is a relatively widespread species reported to occur on five continents with varying temperature, however, it is typically reported as a tropical pest (Henry, 1983). Currently this pest has 40 hosts reported in the literature from the Malvales order. The reported host plants produce seeds at different time of the year, providing potential food source for *O. hyalinipennis* on a continuous basis (Schaefer and Panizzi, 2000). Okra have also been reported as highly acceptable food source and capable of supporting natural growth to this pest (Dimetry, 1971). Both adult and nymph *O. hyalinipennis* feed on seeds, sucking oil from mature seeds. Cotton seeds for example may appear undamaged but internally the feeding reduces the weight (sometimes up to 15%) and ultimately renders them useless as they are incapable of developing (Khan and Ahmed, 2000). The cotton seed bug is native to southern Europe and North Africa. It can now be found in following countries:

Africa:

Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Congo Democratic Republic, Congo, Cote d'Ivoire, Egypt, Ethiopia, Ghana, Guinea, Kenya, Libya, Madagascar, Malawi, Mali, Mauritania, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Tunisia, Uganda, and Zimbabwe.

Asia:

Bangladesh, Cambodia, China, India, Iran, Iraq, Israel, Laos, Myanmar, Pakistan, Philippines, Saudi Arabia, Sri Lanka, Syria, Thailand, Turkey, Vietnam, and Yemen. Central America and Caribbean: Bahamas, Cayman Islands, Cuba, Hispaniola, Puerto Rico, Saint Croix and Saint Thomas, and Turks and Caicos Islands.

Europe:

Austria, Cyprus, France, Germany, Greece, Hungary, Italy, Portugal, Russia, Serbia and Montenegro, and Spain South America: Argentina, Bolivia, Brazil, and Paraguay. In 2010, the cottonseed bug was detected on cotton in a residential area on Stock Island in Monroe County (in the Florida Keys). It was immediately targeted for eradication in March 2010 and was declared eradicated from Florida in early 2014. It has also been sampled in Tennessee, Mississippi, Arkansas, Texas, and Colorado, but it has not been detected (USDA-APHIS, 2010).

O. hyalinipennis primarily feeds on seeds of plants in the Malvaceae family, particularly *Gossypium* spp. (cotton). In addition to cotton, this pest has also been intercepted on certain fruits and vegetables including apple, avocado, corn, dates, figs, grapes, peach,



okra, pineapple, and pomegranate, as well as hibiscus (USDA, 2009). Holtz (2006) classified the following as 'true hosts' of *O. hyalinipennis* within the Malvales order: *Abelmoschus* spp. (*A. esculentus* (okra), *A. moschatus* (musk okra)), *Abutilon* spp. (*A. crispum* (bladder mallow), *A. guineense*, *A. indicum* (monkeybush), *A. mauritanicum*), *Althaea* spp. (*A. rosea* (hollyhock)), *Cola* spp. (cola), *Corchorus* spp. (*C. olitorius* (nalta jute)), *Dombeya* spp., *Gossypium* spp. (*G. barbadense* (Gallini cotton), *G. hirsutum* (Bourbon cotton)), *Hibiscus* spp. (*H. cannabinus* (kenaf), *H. mutabilis* (Dixie rose mallow), *H. sabdariffa* (roselle), *H. tiliaceus* (sea hibiscus), *H. trionum* (Venice mallow)), *Malva* spp. (*M. rotundifolia* (low mallow)), *Malvastrum* spp. (false mallow), *Pavonia* spp. (swamp mallow), *Phymosia umbellata*, *Sida* spp. (*S. acuta*, *S. cordifolia* (llima), *S. mollis*, *S. rhombifolia* (Cuban jute), *S. rhomboidea*), *Sphaeralcea* spp. (globemallow), *Sterculia* spp., *Triumfetta* spp., *Urena lobata* (Caesarweed), *Wissedula amplissima*, Holtz (2006) also listed reported hosts outside of the Malvales order: *Asclepias* spp., *Cydonia* spp., *Diospyros* spp. (Malabar ebony) *Eriodendron* spp., *Ficus carica* (fig), *Malus* spp. (apple), *Persea americana* (avocado), *Phoenix dactylifera* (date-palm), *Prosopis juliflora* (mesquite), *Prunus* spp. (stonefruit), *Pyrus* spp. (pear), *Ricinus communis* (castor beans), *Spondias mangifera*, *Vigna sinensis* (blackeyed pear), *V. unguiculata* (cowpea), *Vitis* spp. (grape), *Zea mays* (corn). This paper recorded the presence of *O. hyalinipennis* as a new record on *Psidium guajava* in El Shatbi faculty farm - Sabahia - Alexandria, Egypt as a first record on this fruit trees (Fig.1).



A



B

Figure 1. A&B clear the presence of *O. hyalinipennis* on *Psidium guajava* leaves at El Shatbi faculty farm - Sabahia -Alexandria, Egypt (photos taken by The two authors).



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