SHORT COMMUNICATION

First record of the scale insect Asterodiaspis ilicicola in Greece and additional data about the scale Gonaspidiotus minimus on Quercus ilex

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Summary The scale insect Asterodiaspis ilicicola (Targioni Tozzetti) (Hemiptera, Coccoidea, Asterolecaniidae) was recorded for the first time in Greece in February 2013. It was found on Quercus ilex, in the National Garden of Athens. On the same infested trees, the scale insect Gonaspidiotus minimus (Leonardi) (Hemiptera, Coccoidea, Diaspididae) was also recorded. Both scale species were settled on the upper surface of leaves of Q. ilex.

According to ScaleNet Database (Ben-Dov et al., 2013) the scale insects species of the family Asterolecaniidae recorded in Greece include Asterodiaspis bella (Russell) (Russell, 1941; Borchsenius, 1960), A. repugnans (Russell) (Russell, 1941; Borchsenius, 1960), A. variolosa (Ratzeburg) (Milonas et al., 2008) and Pollinia pollini (Costa) (Alexandrakis, 1980).

Asterodiaspis ilicicola (Targioni Tozzetti) (Hemiptera, Coccoidea, Asterolecaniidae) was recorded for the first time in Greece on Quercus ilex (Fagaceae) in the National Garden of Athens in February 2013. On the same trees, the scale insect Gonaspidiotus minimus (Leonardi) (Hemiptera, Coccoidea, Diaspididae) was also recorded. The colonies of both scale species were settled on the upper surface of leaves of Q. ilex (Fig. 1 and Fig. 2). The vouchers of the permanent slides of A. ilicicola are deposited in collections of the University of Padova and of the Laboratory of Agricultural Entomology & Zoology of the Highest Technological Educational Institute of Kalamata. The vouchers of the permanent slides of G. minimus are deposited in collec-

Figure 1. Asterodiaspis ilicicola on leaves of Quercus ilex (Photo by G. Stathas).

Figure 2. Gonaspidiotus minimus on leaves of Quercus ilex (Photo by G. Stathas).
tions of the Plant Protection Institute of the Hungarian Academy of Sciences and of the Laboratory of Agricultural Entomology & Zoology of the Highest Technological Educational Institute of Kalamata.

Asterodiaspis illicicola is a species of Palearctic Region, recorded in Algeria, Croatia, France, Italy, Portugal, Spain and Turkey (Ben-Dov et al., 2013; Pellizzari & Camporese, 1991; Pellizzari and Fontana, 1996). The host plant species of A. illicola involve Quercus coccifera, Q. ilex, Q. rotundifolia and Q. suber (Ben-Dov et al., 2013).

Gonaspispidiotus minimus was recorded for the first time in Greece by Koroneos (1934) as the synonym Aspidiotus minimus (Leontaridi) Cockerell, which was rarely found on Q. ilex in the regions Milies and Neohkoron of Magnesia (Central Greece) and more often on Q. coccifera in Magnesia and Attica. Later, Jansen et al. (2010) and Pellizzari et al. (2011) recorded G. minimus on Q. coccifera in Crete. This is a species of Palearctic Region, referred as scale insect pest of Chamerops humilis (Arecaceae) and species of Fagaceae (Quercus coccifera, Q. ilex, Q. ilicis, Q. incana, Q. ithaburensis and Q. suber). It is recorded in Algeria, Croatia, France, Greece, Israel, Italy, Lebanon, Morocco, Spain and Turkey (Ben-Dov et al., 2013).

Although the infestation level of A. illicicola on Q. ilex cannot be considered significant, it is wise to encourage the study of the scale’s distribution in other areas of the country. The reason is the possibility that this scale may infest Q. coccifera, which is a very important forest species for Greece. Similar studies were made in the past on other forest species e.g. Physokermes inopinatus Danzig & Kozár (Hemiptera: Coccoidea) (Hungarian spruce scale) found on Abies cephalonica and Planococcus vovae (Nasonov) found on various Cupressus species in Greece (Milonas et al., 2008; Stathas et al., 2010). The scale G. minimus was found on Q. ilex in a higher population density than A. illicicola. The fact that G. minimus was recorded on a different host plant than the one found by Koroneos, underlines the necessity to support regular surveys on scale insects in order to complete the missing parts of existing data of Coccoidea fauna in Greece.

Acknowledgments

The authors would like to express their gratitude to Professor Giuseppina Pellizzari, University of Padova, for identification of Asterodiaspis illicicola and Dr Ferenc Kozár, Plant Protection Institute, Hungarian Academy of Sciences, for identification of Gonaspispidiotus minimus.

Literature cited


Pellizzari Scaltriti, G. & Camporese, P. 1991. [Contribution to the knowledge of scale insects (Homoptera, Coccoidea) living on oaks in Italy.] Contributo alla conoscenza delle cocciniglie (Homoptera, Coccoidea) delle querce in Italia. (In Italian; Summary In English). 193-209.

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Πρώτη καταγραφή του κοκκοειδούς Asterodiaspis ilicicola στην Ελλάδα και στοιχεία για την παρουσία του κοκκοειδούς Gonaspidiotus minimus στο Quercus ilex

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Περιλήψη Καταγράφηκε για πρώτη φορά στην Ελλάδα το κοκκοειδές έντομο Asterodiaspis ilicicola (Targioni Tozzetti) (Hemiptera, Coccoidea, Asterolecaniidae) το Φεβρουάριο του 2013. Το έντομο βρέθηκε επί του Quercus ilex, στον Εθνικό Κήπο της Αθήνας. Στα ίδια προσβεβλημένα δέντρα βρέθηκε και το κοκκοειδές έντομο Gonaspidiotus minimus (Leonardi) (Hemiptera, Coccoidea, Diaspididae). Και τα δύο αυτά είδη βρέθηκαν εγκατεστημένα στην άνω φυλλική επιφάνεια του Q. ilex.