

Short communication

First record of *Phimodera flori* Fieber, 1863 (Hemiptera: Heteroptera: Scutelleridae) in the Apennines massif in southern Italy

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Abstract. *Phimodera flori*, a rare high-altitude Scutelleridae known in Italy only in three regions of the Alps, is observed for the first time in the Apennines massif, in the Abruzzo region of Italy, 600 km south of these places.

Key words: Heteroptera, Scutelleridae, *Phimodera flori*, distribution, new record, Alps, Apennines, Italy.

Phimodera flori Fieber, 1863 (Fig. 1) is a very rare Euro-siberian Scutelleridae species. In Spain, France, Italy and Greece it has only been observed locally in high altitude regions. It is only mentioned in Cerdagne in the eastern zone of the Pyrenees massif, in France (Dusoulie & Lupoli 2011; Lupoli & Dusoulie 2015) and Spain (Lupoli 2018) at around 1,650 m altitude.

It is mentioned in the Alpine massif at more than 2,400 m altitude in three regions (Tamanini 1982; Dioli & Girodo 2014):

- In the Briançon region (Hautes-Alpes) in France and Italy, Claviere and Colle dell'Assietta (Piemonte),
- Around Bolzano and Trentino in the Adige valley (Trentino-Alto Adige),
- South face of Mount Cervino, Torrente Marmore Valley, Cime Bianche (Valle d'Aosta).

Finally, it was mentioned for the first time in the Balkan Peninsula in Greece near Mount Olympus at an altitude of more than 2,500 m (Dioli 2021).

P. flori has also been mentioned in other European countries: Germany, Hungary, Poland, Latvia, Russia, and, therefore, probably in lowland regions (Göllner-Scheiding 2006). Davidová-Vilímová & Král (2003) also mentioned the presence of *P. flori* in the Czech Republic at 400 m altitude in dune sands.

However, given that *P. flori* has never been found at low altitudes in Spain, France, Italy or Greece, despite a large number of sandy and dune regions and a large number of observations.

Conversely, *P. humeralis* (Dalman, 1823) was found in these environments and never at high altitude, it is

very likely with such a different ecology that the low altitude observations of *Phimodera* do not correspond to *P. flori*.



Fig. 1. Female of *Phimodera flori*, Fieber, 1863 observed in Mount Greco (Abruzzo, Italy) (photo: Emanuele Santarelli).

Material examined: ITALY: Abruzzo, Province of L'Aquila, Mount Greco (2,250 m), Lat.: 41.7982 Long.: 13.9934, 15.VI.2024, 1 female, Emanuele Santarelli leg. (Fig. 1).

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This specimen was discovered on the ground.

P. flori is distinguished from *P. humeralis* by its tylus, which exceeds the jugae (shorter in *P. humeralis*), its much smaller abdominal tubercles, and the antero-lateral border of the pronotum with a slight sinuosity (very concave and angular in *P. humeralis*). The lateral edges of the pronotum are almost straight in *P. lapponica* (Zetterstedt,

1828), another high-altitude species with a monochrome body observed in Valais in Switzerland.

In the Pyrenees *P. flori* has been reported on *Scleranthus perennis* (Caryophyllaceae) (Dusoulie & Lupoli, 2011), and in the Alps on *Minuartia verna* (Caryophyllaceae) and *Ranunculus kuepferi* (Ranunculaceae) (Dioli & Girodo 2014; Lupoli 2018).

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