

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

22-27636

***Pronematus ubiquitous* (Neuroptera: Hemerobiidae)**

Listed in: *PM 6/3 Biological control agents safely used in the EPPO region (2022): Appendix 1 – commercially used biological control agents.*

Further details are given for each BCA, including its preferred scientific name, common synonyms, taxonomic classification, the pests against which it is mostly targeted, its origin and the date of first use as a commercial agent. In cases where information is not known a (?) is detailed. Countries where it is or has been used in the EPPO region are also listed on the basis of information provided by the companies and by some EPPO countries. This information may not have been available from all EPPO countries and may therefore be incomplete. Each agent has been used commercially at some time in the countries listed, but in some cases may no longer be commercially available or used there. Information is also given, when available, on the natural distribution of the agent in the EPPO region, whether it is used in the field and/or under protected conditions. Additional remarks are included when necessary

Detailed information (from *PM 6/3 Biological control agents safely used in the EPPO region*)***Pronematus ubiquitous***

Synonyms	<i>Tydeus ubiquitous</i>
Family	Iolinidae
Main target pests	<i>Aculops lycopersici</i> , <i>Tetranychus urticae</i> , <i>Acalitus</i>
Original distribution	Cosmopolitan
Distribution in EPPO	Widespread
Date of first use	2021
EPPO countries where used	Belgium, Germany, Greece, Netherlands, Spain
Use	Indoors/outdoors

Criteria used for adding *Pronematus ubiquitus* to PM 6/3 PM 6/3 Biological control agents safely used in the EPPO region

1. Criteria used for addition to the List*

A biological control agent which is (or has been) commercially available or officially used	<input checked="" type="checkbox"/>
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AND either

Has been used for at least 5 years in at least 5 EPPO countries (exceptionally fewer, if relevant crops, target pests or plants are present in <5 countries), or	<input type="checkbox"/>
Is indigenous and widespread in part of, or the whole of EPPO region, or	<input checked="" type="checkbox"/>
Is established and widespread in part of, or the whole of the EPPO region	<input checked="" type="checkbox"/>

AND

There are no previous reports of adverse effects	<input checked="" type="checkbox"/>
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Criteria	Summary information (for EPPO region*)	References
BCA has been used for at least 5 years in at least 5 EPPO countries (exceptionally fewer, if relevant crops, target pests or plants are present in less than 5 countries)		
Is indigenous and widespread in part of, or the whole of EPPO region	<i>P. ubiquitus</i> has a cosmopolitan distribution on all continents (except Antarctica), including Europe	Kumral and Çobanoğlu, 2015; van Houten et al., 2020; Van De Velde, 2021
Is established and widespread in part of, or the whole of the EPPO region	<i>P. ubiquitus</i> has a cosmopolitan distribution on all continents (except Antarctica), including Europe	Kumral and Çobanoğlu, 2015; van Houten et al., 2020; Van De Velde, 2021

References

Kumral NA & Cobanoglu S (2015) The potentials of the nightshade plants (Solanaceae) as reservoir plants for pest and predatory mites. *Türkiye Entomoloji Dergisi*, 39(1), 91–108.

Van de Velde V (2021). Potential of *Pronematus ubiquitus* as a biocontrol agent of spider mites in tomato. *Master thesis*, 52 pp.

van Houten YM, Hoogerbrugge H, Knapp M (2020). Potential of *Pronematus ubiquitus* to control tomato russet mite, *Aculops lycopersici*. *IOBCwprs Bull.* 149, 87–92.