

## Abstract

# Engaging Citizen-Scientists in Mapping Alien Species: Introducing Alientoma, A Dynamic Database for Alien Insects in Greece <sup>†</sup>

Konstantinos Kalaentzis <sup>1,2,\*</sup>, Christos Kazilas <sup>1,2</sup>, Jakovos Demetriou <sup>3</sup>, Evangelos Koutsoukos <sup>4</sup>, Christos Georgiadis <sup>5,6</sup> and Dimitrios N. Avtzis <sup>7</sup>

<sup>1</sup> Institute of Biology, Leiden University, Sylvius Laboratory, Sylviusweg 72, 2333 BE, Leiden, The Netherlands

<sup>2</sup> Naturalis Biodiversity Center, PO Box 9517, 2300 RA, Leiden, The Netherlands

<sup>3</sup> Section of Ecology and Systematics, Department of Biology, National and Kapodistrian University of Athens, 15772 Athens, Greece

<sup>4</sup> Museum of Zoology, National and Kapodistrian University of Athens, 15772 Athens, Greece

<sup>5</sup> Department of Biology, College of Science, United Arab Emirates University, PO Box 15551, Al Ain, Abu Dhabi, UAE

<sup>6</sup> Section of Zoology and Marine Biology, Department of Biology, National and Kapodistrian University of Athens, 15784 Athens, Greece; cgeorgia@biol.uoa.gr

<sup>7</sup> Forest Research Institute - Hellenic Agricultural Organization Demeter, 57006 Vassilika, Thessaloniki, Greece

\* Correspondence: konstakal95@gmail.com

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**Abstract:** Biological invasions have become one of the most intimidating environmental and economic threats of our time, as a result of the globalization and the rise of international commerce [1][2]. Alien species of insects represent one of the most abundant groups of introduced organisms in Europe, while a large number of them are associated with substantial economic burden, biodiversity loss, health problems and disturbance to ecosystem functioning [3]. Over the last decade, citizen-science has emerged as a valuable tool in ecological studies, and in particular for the early detection and monitoring of alien species worldwide [4]. Alientoma – a compound word deriving from “alien” and the Greek word “entoma” meaning insects – aims to create a dynamic checklist and a constantly-updated database of these organisms in Greece, where a large number of non-native insect species is already present [5]. The species catalogue is based on a recent scientific review of alien insect species in Greece, which was compiled after an extensive literature search [5], coupled with records from museum collections and other online databases [6][7]. Alientoma provides information on alien species (i.e. status, distribution, taxonomy, common names, impacts) to the public as well as the scientific community in order to inform and assist the mitigation of their adverse impacts, respectively. This project intends to promote public participation in scientific research regarding alien species, encouraging the involvement of citizen-scientists through the collection of occurrence records.

**Keywords:** alien species; citizen science; invasive species; Greece; online platform; checklist

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