



Session: Taxonomy: Identifying the units of diversity in life

1 July 2025 | 14:30-16:30



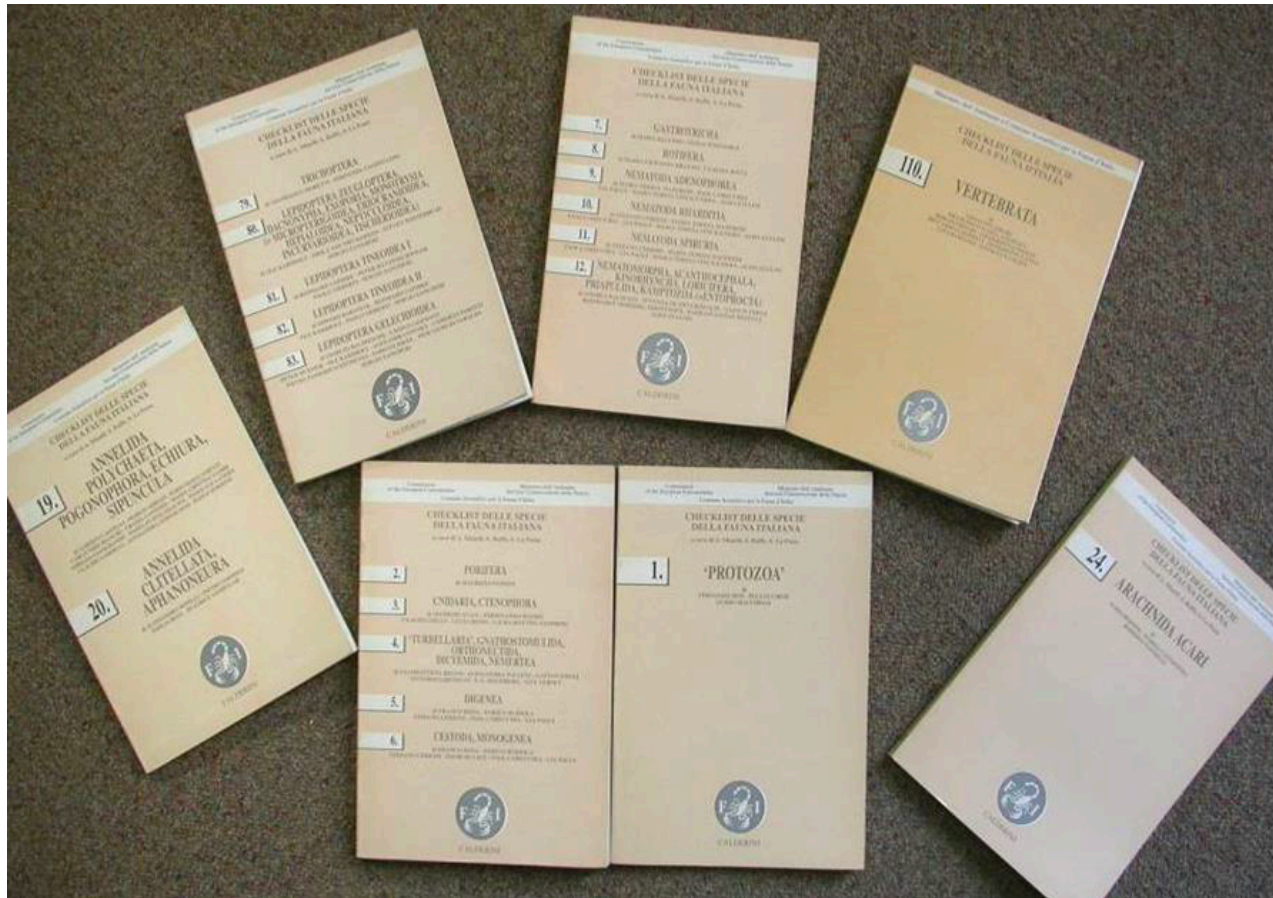
The Italian taxonomic backbone. Cooperation and interoperability in the LifeWatch community

Presenter: Stefano Martellos

The taxonomic backbone is based on the data aggregated in three checklists available online:

- The new Checklist of the Italian Fauna
- FlorItaly, the portal to the vascular flora of Italy
- ITALIC 8.0, the information system to the lichens of Italy

The checklist of the Fauna of Italy



Minelli A., Ruffo S., La Posta S.
(eds), 1992-1995.

Checklist delle specie della fauna italiana.

Ministero dell'Ambiente, Comitato Scientifico per la Fauna d'Italia. Calderini Editore.

**1812 protozoans
& 55.656 animals**

The New Checklist of the Fauna of Italy

Checklist

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Checklist

Il dataset contiene una checklist aggiornata delle specie terrestri, d'acqua dolce e marine di Metazoa presenti in Italia; la prima versione del dataset include > 27.600 specie e sottospecie. Per ciascuna specie viene fornita una classificazione tassonomica aggiornata e sono forniti anche il Linnean binome e l'autorship attualmente accettati, accompagnati da dati distributivi (occorrenza in 4 macroregioni terrestri e 9 marine, e opionalmente occorrenza in altre 23 regioni amministrative italiane o aree limitrofe all'estero). Sono indicati gli endemici e le

Checklist Fauna d'Italia

ABOUT
PUBBLICAZIONI
TEAM
CHECKLIST
CSFI

online beta-version
updated at Jan 2025
31642 species

Next steps

- Complete checklist (*specialists wanted*)
- Editorial Board (*specialists wanted*)
- Continuous updating (*link to global lists*)
- New functionalities (*alerts; check of taxonomies...*)

The New Checklist of the Fauna of Italy

Biogeographia – The Journal of Integrative Biogeography 37 (2022): uc1001
https://doi.org/10.21426/B637156271
Special Section: The new Checklist of the Italian Fauna

Towards the new Checklist of the Italian Fauna

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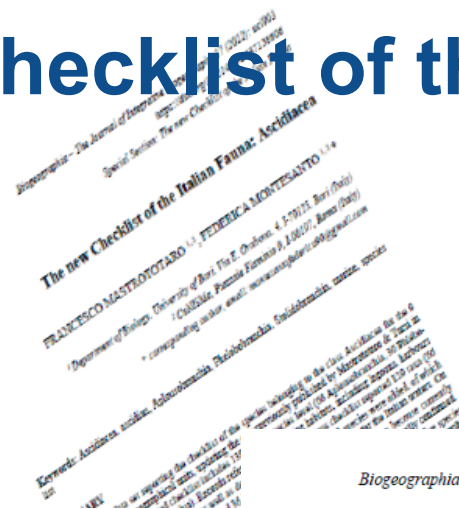
⁷ Dipartimento per la innovazione nei Sistemi Biologici, Agroalimentari e Forestali, Università della
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Keywords: Biodiversity; Metazoa; Italy; marine species; terrestrial species; freshwater species

SUMMARY

The Scientific Committee for the Italian Fauna is managing the new checklist of the animal species of Italy. The previous checklist was published in 1993-1995 and included both protozoans and Metazoa (more than 57,000 species); the new project, which includes only Metazoa, started in 2020 and is aimed at updating the former checklist (with more than 60,000 expected species) by on-line datasets and data papers. The new checklist includes marine species recorded in the Italian seas, divided into nine marine sectors, within the Italian Economic Exclusive Zone, and terrestrial and freshwater species recorded in administrative regions, as well as in the three macro-regions (northern continental, southern peninsular and insular - Sicily and Sardinia - macro-regions). Records from geopolitical units biogeographically



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Special Section: The new Checklist of the Italian Fauna

The new Checklist of the Italian Fauna: Formicidae

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Special Section: The new Checklist of the Italian Fauna

The new Checklist of the Italian Fauna: Mecoptera

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Keywords: Bittacidae, Boreidae, Panorpidae, scorpionflies, species list

ABSTRACT

We present a data set reporting the checklist of the species of the order Mecoptera for Italy, updating the previously published in the series "Checklist delle Specie della Fauna d'Italia" in 1995. The updated checklist comprises 11 taxa at the species and subspecies level, currently known from national Italian territories (7 Panorpidae, 2 Bittacidae, 2 Boreidae). The records are at the regional level and refer to various terrestrial habitats. The previous checklist reported 10 taxa (6 Panorpidae, 2 Bittacidae, 2 Boreidae); no taxa were removed because currently considered not valid and one was added, after scanning 16 papers published between 1993 and 2020 and expanding the regional records. The data set is freely available from LifeWatch Italy at <https://www.lifewatchitaly.eu/en/initiatives/checklist-fauna-italiana/checklist>. The data set will be dynamically updated with new records; this paper describes the state of the art of the data set on December 2021.

INTRODUCTION

Thanks to the pioneering work carried out towards the end of the last century, achieved thanks to the project "Checklist delle Specie della Fauna d'Italia" (Minelli et al. 1993-1995), the animal biodiversity of our country was one of the first to be exhaustively listed, photographing the situation of that period. The aim of this data paper is to provide information on the updated checklist, limited to the order

Mecoptera, with the description of the state of the art of the updated data set as it currently stands in December 2021.

The project on the "Updated Checklist of the Italian Fauna" started in 2020 (Bologna et al. 2022) and the process is now complete for the data on the order Mecoptera. The database reported in this data paper will be continuously updated in the online platform of LifeWatch Italy, allowing for a dynamically updated knowledge

Letardi, 2022

Biogeographia 37: uc1002

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This huge resource is coordinated by the Comitato Scientifico per la Fauna d'Italia, it is fully supported by the LifeWatch Italia Joint Research Unit, and is integrated in the LW-ITA portal.



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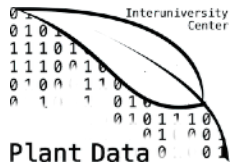
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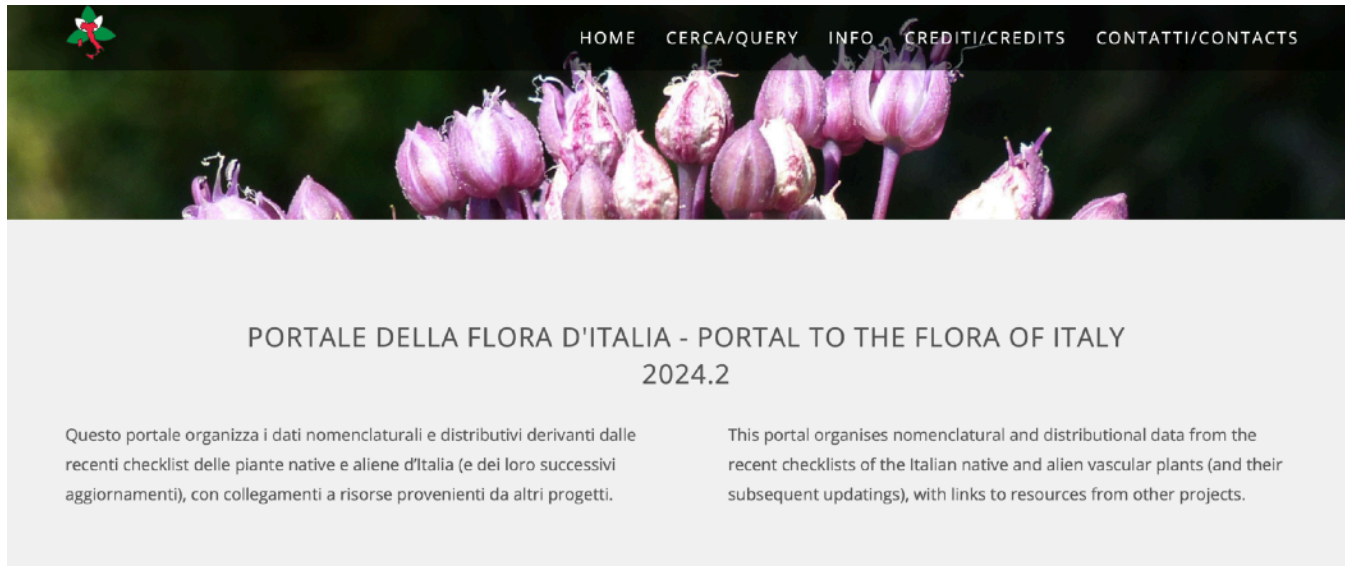


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Main features:

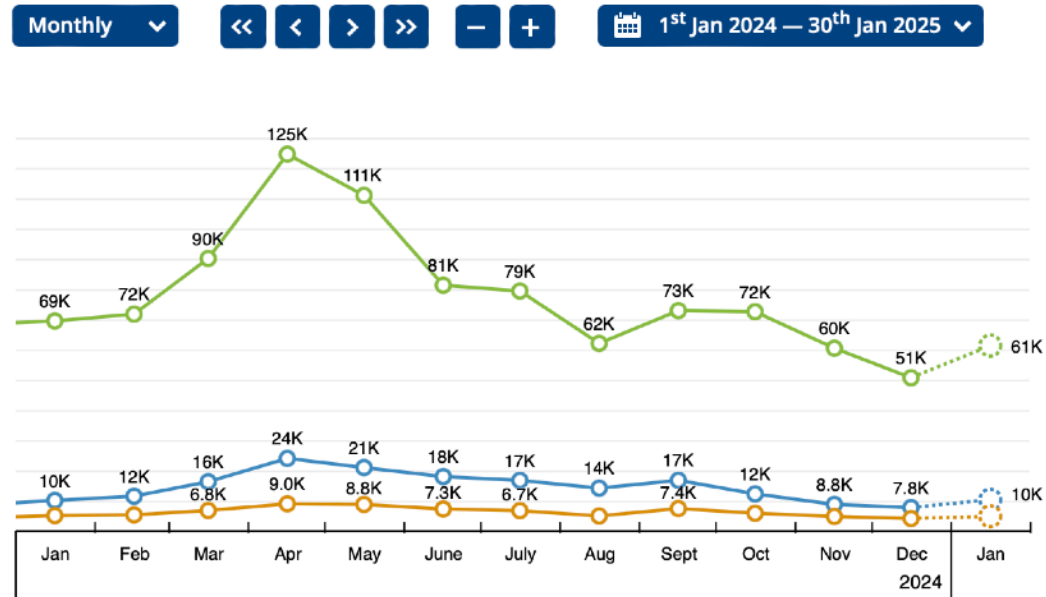
- Updated every 6 months
- aggregates data and images from several sources
- written in PHP, data are stored in a MySQL DB
- extensible to aggregate further data from different sources
- fully scalable and replicable

The checklist:

11161 accepted names

16668 synonyms

FlorItaly



- ☒ Page Views
- ☒ Unique Visits
- ☒ Returning Visits
- ?



ITALIC 8.0



Main features:

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- aggregates data and images from several sources
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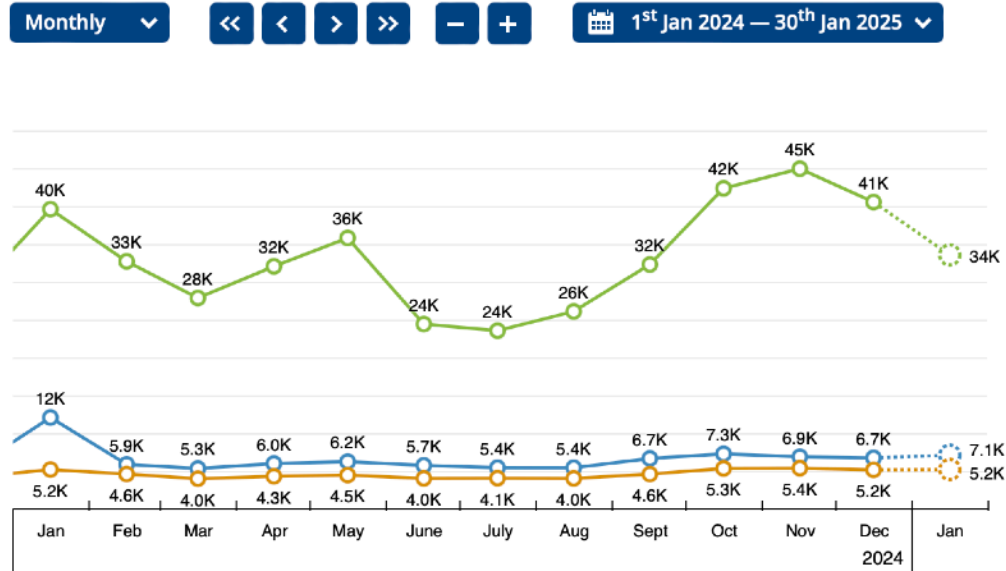
The checklist:

3368 accepted names

3367 basionyms

9773 synonyms

ITALIC 8.0

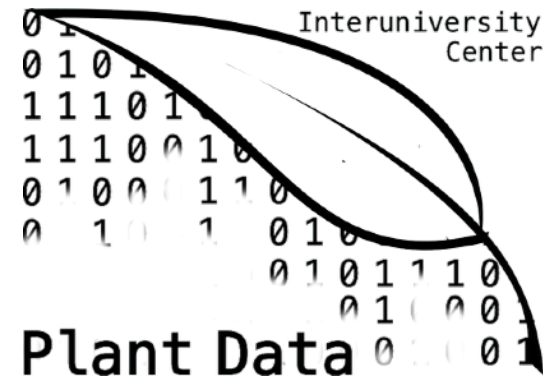


These resources were originally developed in the framework of project *Dryades*. Now are managed and sustained in cooperation with the InterUniversity Center Plant Data, which is part of the LifeWatch Italia Joint Research Unit.

Dryades



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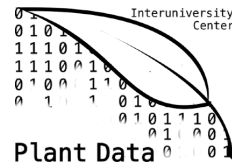
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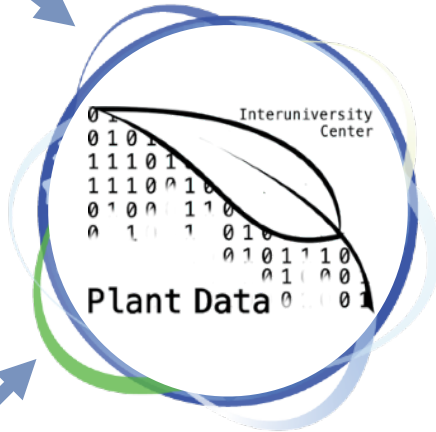


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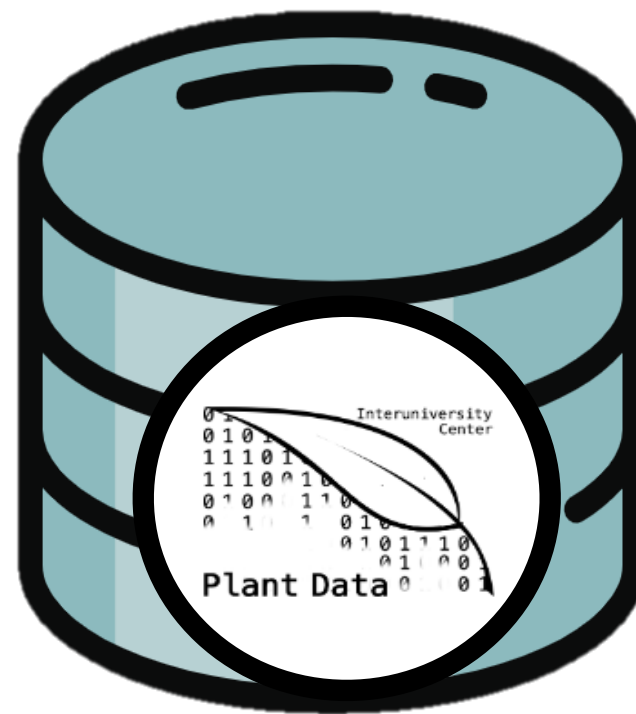
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API



Future development

The checklist of mosses and liverworts, which has been published recently, is awaiting to be transformed into another information system.

The checklist of macrobasidiomycetes, while available online, dates back to 2004. Discussions are in place to decide whether it is still useful as a nomenclatural reference.



Sustainability

The more resources and services you provide, the higher the costs related to sustainability.

Thanks to LifeWatch, infrastructure is not an issue.

And personnel - from the technical point of view, is not an issue at the moment, as well.

Sustainability

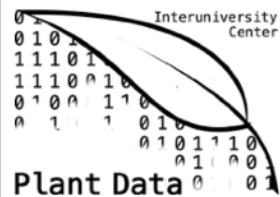
However

Sustainability

A major concern could be the community of taxonomists which is fundamental for producing and maintaining a solid and reliable checklist.

Our major concern is thus to support the taxonomy community. This will allow LifeWatch and all the scientific community to benefit from their expertise in the future, as well.

**A BIG thank
to all of the taxonomists
which volunteered to make
the huge effort of building
these fundamental checklists**



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Thank you!

Questions?
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The LifeWatch ERIC Biodiversity & Ecosystem
eScience Conference



Heraklion, 30 June - 3 July 2025



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