

# CDF Checklist of Galapagos Grasshoppers, locusts and crickets

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## Abstract

This Checklist of Galapagos Grasshoppers, locusts and crickets includes a total of all 38 taxa reported from the Galapagos Islands. For each name, detailed information is provided: its Galapagos distribution in islands groups or bioregions generated from the specimen records, comments about the taxonomy (especially synonyms), the origin (native and introduced), taxon status (accepted vs. rejected records) and relevant literature references.

## Introduction

This publication lists all species of Galapagos Grasshoppers, locusts and crickets currently known.

The Order **Orthoptera** contains a varied assemblage of insects, which are usually herbivores, but some may be predators or scavengers.

Considering the richness of the mainland Ecuador fauna, the island fauna are highly impoverished.

Colonization may have been by flight (and wind) for strong fliers such as *Schistocerca*, *Sphingonotus*, and *Neoconocephalus*.

Rafting is more likely for weak fliers and flightless groups, especially in the Gryllidae (Nemobiinae and Mogoplistinae).

Seventy-four percent of the endemic species are flightless. Loss of flight ability on the Galapagos has occurred in *Halmenus* (maybe it is a descendent from a *Schistocerca* locust), *Closteridea*, *Gryllus*, and *Conocephalus*.

Of special note is the evolution of the two species of eyeless subterranean *Anurogryllus* crickets. No eyed ancestor of these is known in the islands. Evolution of endemics in the Orthoptera has been relatively frequent when compared to most other insect groups.

## Methods

This checklist of all known Galapagos Grasshoppers, locusts and crickets is automatically generated using the online database of the Charles Darwin Foundation Galapagos Species Checklist.

All CDF Galapagos Species Checklists represent the synthesis of many different records: literature citations, data from previously unpublished reports (grey literature), specimen records of natural history collections located in Galapagos and all over the world. To the best of their knowledge authors of the individual checklists revised all available data. When new information becomes available,

the taxonomy of a group changes or new species are discovered, the CDF online database and thus this publication becomes updated.

For many poorly known species groups the higher taxonomic classification still regularly changes according to how our knowledge about species being related changes. In many well known groups the phylogeny is somewhat stable, but to avoid confusion, in particular for groups where taxonomic changes are frequent, all checklists presented here are sorted alphabetical according to genus name and specific epithet. Please refer to the website for the currently accepted taxonomic hierarchy of each group.

Please be aware that the distribution presented here is automatically generated from specimen records and does not always accurately reflect the known distribution for all species.

For marine species, the distribution generally refers to the five main bioregions of the archipelago (Far Northern, Northern, Western, South Eastern and the Elisabeth Bay Bioregion). For the terrestrial species more than 120 islands, islets and small rocks have been aggregated into Islands Groups, thus, for example, the island group "Santa Cruz" includes smaller islands like Santa Fé, Plaza Norte, Plaza Sur, Baltra, Daphne Mayor, Daphne Minor, and others.

IUCN red-list assessments presented here may deviate from the global IUCN list for the following reasons:

- for well known species groups like vascular plants or vertebrates updates proposed to the IUCN are shown instead of the outdated, but currently accepted status;
- for poorly known species groups (e.g., lichenized fungi) a general assessment is currently not possible and the list presented here is a regional red-list list for Galapagos archipelago.

Numbers of the species included in this list are auto-generated. Adding up the number of species in each category will not always equal the total number indicated. Some species have insufficient data to be categorized while others (e.g., category eradicated) will not be included in the total.

## Results

**Names of taxa included in this checklist:** 38 (33 accepted, 1 unidentified taxon, 4 new to science).

**Origin of the taxa included:** 4 accidental, 29 endemic, 1 indigenous.

1. *Anaulocomera darwinii* Scudder, 1893

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Anaulocomera cornucervi*

**Origin:** Native, Endemic.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Hebard, M. et al. (1920), Linsley, E.G. et al. (1966), Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).

2. *Anurogryllus sp. 2*

**Taxon status:** Taxon not identified to species, subspecies, form or variety.

**Origin:** Native, Endemic.

**Galapagos Distribution:** Santa Cruz.

**References:** Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).

3. *Anurogryllus typhlops* Otte & Peck, 1998

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**Galapagos Distribution:** Isabela.

**References:** Otte, D. et al. (1998), Peck, S.B. et al. (2001).

4. *Closteridea bauri* Scudder, 1893  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Endemic.  
**Galapagos Distribution:** Floreana, San Cristóbal, Santa Cruz.  
**References:** Dirsh, V.M. et al. (1969), Hebard, M. et al. (1920), Linsley, E.G. et al. (1977), Linsley, E.G. et al. (1966), Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).
5. *Conocephalus exitiosus* (McNeil, 1901)  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Endemic.  
**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz, Santiago.  
**References:** Hebard, M. et al. (1920), Linsley, E.G. et al. (1966), Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).
6. *Conocephalus sp. nov. 1*  
**Taxon status:** Unpublished name (Nomen nudum).  
**Origin:** Native, Endemic.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Peck, S.B. et al. (2001).
7. *Conocephalus sp. nov. 2*  
**Taxon status:** Unpublished name (Nomen nudum).  
**Origin:** Native, Endemic.  
**Galapagos Distribution:** San Cristóbal, Santa Cruz.  
**References:** Peck, S.B. et al. (2001).
8. *Copiphora brevicauda* Karny, 1912  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Introduced, Accidental.  
**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz, Santa Fé.  
**References:** Peck, S.B. et al. (1996), Peck, S.B. et al. (1998), Peck, S.B. et al. (2001).
9. *Cycloptilum erraticum* Scudder, 1893  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** No Data.  
**Galapagos Distribution:** Española, Fernandina, Floreana, Genovesa, Isabela, Marchena, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.  
**References:** Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).
10. *Cycloptilum lepismoide* McNeill, 1901  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Endemic.  
**Galapagos Distribution:** Española, Fernandina, Floreana, Genovesa, Isabela, Marchena, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santiago.  
**References:** Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).

11. *Desmopleura concinna* Shudder, 1893  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Known only from the type specimen (Santiago = San Salvador). Probably a mislabelled specimen of *Dichroplus vittiger* of Argentina, fide Peck (2001)  
**Origin:** No Data.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Dirsh, V.M. et al. (1969), Linsley, E.G. et al. (1977), Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).
12. *Grylloides sigillatus* (Walker)  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Introduced, Accidental.  
**Galapagos Distribution:** Genovesa, Marchena, San Cristóbal, Santa Cruz.  
**References:** Peck, S.B. et al. (1996), Peck, S.B. et al. (1998), Peck, S.B. et al. (2001), Peck, S.B. et al. (1996).
13. *Gryllus abditus* Otte & Peck, 1997  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Endemic.  
**Galapagos Distribution:** Española, Fernandina, Floreana, Isabela, San Cristóbal, Santa Cruz, Santa Fé, Santiago.  
**References:** Otte, D. et al. (1997), Peck, S.B. et al. (2001).
14. *Gryllus abingdoni* Otte & Peck, 1997  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Endemic.  
**Galapagos Distribution:** Pinta, Santa Cruz, Santa Fé.  
**References:** Otte, D. et al. (1997), Peck, S.B. et al. (2001).
15. *Gryllus darwini* Otte & Peck, 1997  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Endemic.  
**Galapagos Distribution:** Darwin, Santa Cruz.  
**References:** Otte, D. et al. (1997), Peck, S.B. et al. (2001).
16. *Gryllus galapageius* Scudder, 1893  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
Syn.: *Gryllus assimilis*  
**Origin:** Native, Endemic.  
**Galapagos Distribution:** Santa Cruz, Santa Fé, Santiago.  
**References:** Otte, D. et al. (1997), Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).
17. *Gryllus genovesa* Otte & Peck, 1997  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Endemic.  
**Galapagos Distribution:** Genovesa, Santa Cruz.

**References:** Otte, D. et al. (1997), Peck, S.B. et al. (2001).

18. *Gryllus isabela* Otte & Peck, 1997

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**Galapagos Distribution:** Isabela.

**References:** Otte, D. et al. (1997), Peck, S.B. et al. (2001).

19. *Gryllus marchena* Otte & Peck, 1997

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**Galapagos Distribution:** Isabela, Marchena, Santa Cruz.

**References:** Otte, D. et al. (1997), Peck, S.B. et al. (2001).

20. *Gryllus pinta* Otte & Peck, 1997

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**Galapagos Distribution:** Española, Pinta, Santa Cruz.

**References:** Otte, D. et al. (1997), Peck, S.B. et al. (2001).

21. *Halmenus choristopterus* Snodgrass, 1902

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Halmenus robustus choristopterus*

**Origin:** Native, Endemic.

**Galapagos Distribution:** Floreana, Isabela.

**References:** Dirsh, V.M. et al. (1969), Linsley, E.G. et al. (1977), Parkin, P. et al. (1972), Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).

22. *Halmenus cuspidatus* Snodgrass, 1902

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Halmenus robustus cuspidatus*

**Origin:** Native, Endemic.

**Galapagos Distribution:** Isabela.

**References:** Dirsh, V.M. et al. (1969), Linsley, E.G. et al. (1977), Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).

23. *Halmenus eschatus* Hebard, 1920

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**Galapagos Distribution:** Santa Cruz, Wolf.

**References:** Dirsh, V.M. et al. (1969), Hebard, M. et al. (1920), Linsley, E.G. et al. (1977), Linsley, E.G. et al. (1966), Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).

24. *Halmenus robustus* Scudder, 1893

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Halmenus robustus robustus*

**Origin:** Native, Endemic.

**Galapagos Distribution:** Floreana, Genovesa, Isabela, Santa Cruz, Santa Fé, Santiago.

**References:** Dirsh, V.M. et al. (1969), Linsley, E.G. et al. (1977), Linsley, E.G. et al. (1966), Parkin, P. et al. (1972), Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).

25. *Hygronemobius daphne* Otte & Peck, 1998

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Darwin, Isabela, Santa Cruz.

**References:** Otte, D. et al. (1998), Peck, S.B. et al. (2001).

26. *Hygronemobius sp. nov. 1*

**Taxon status:** Unpublished name (Nomen nudum).

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

**References:** Peck, S.B. et al. (1990), Peck, S.B. et al. (1996).

27. *Hygronemobius sp. nov. 2*

**Taxon status:** Unpublished name (Nomen nudum).

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

**References:** Peck, S.B. et al. (1990).

28. *Hygronemobius speculi* (McNeill, 1901)

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**Galapagos Distribution:** Darwin, Española, Fernandina, Floreana, Isabela, San Cristóbal, Santa Cruz, Santa Fé.

**References:** Hebard, M. et al. (1920), Linsley, E.G. et al. (1966), Otte, D. et al. (1998), Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).

29. *Jarmilaxipha ecuadorica* Otte & Peck, 1998

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Fernandina, Floreana, Isabela, San Cristóbal, Santa Cruz, Santiago.

**References:** Otte, D. et al. (1998), Peck, S.B. et al. (2001).

30. *Neoconocephalus triops* (Linnaeus, 1758)

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Conocephalus insulanus*, *C. insularum*

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Española, Fernandina, Floreana, Isabela, Marchena, Pinta, San Cristóbal, Santa Cruz, Santiago.

**References:** Hebard, M. et al. (1920), Hickin, N. et al. (1979), Linsley, E.G. et al. (1966), Peck, S.B. et al.

(1996), Peck, S.B. et al. (2001).

31. *Nesoecia cooksonii* (Butler, 1877)

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Nesoecia cooksoni ensifer*, *N. pallidus*, *N. paludicola*

**Origin:** Native, Endemic.

**Galapagos Distribution:** Española, Fernandina, Floreana, Genovesa, Isabela, Pinzón, Santa Cruz, Santa Fé, Santiago.

**References:** Linsley, E.G. et al. (1977), Parkin, P. et al. (1972), Peck, S.B. et al. (2001).

32. *Nesoecia padulicola* McNeill, 1901

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**Galapagos Distribution:** Isabela.

33. *Pteronemobius cristobalensis* Otte & Peck, 1998

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**Galapagos Distribution:** San Cristóbal, Santa Cruz.

**References:** Otte, D. et al. (1998), Peck, S.B. et al. (2001).

34. *Pteronemobius santacruzensis* Otte & Peck, 1998

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz.

**References:** Otte, D. et al. (1998), Peck, S.B. et al. (2001).

35. *Schistocerca literosa* (Walker, 1870)

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Schistocerca discoidalis*, *Schistocerca punctata*, *Schistocerca hyalina*

**Origin:** Native, Endemic.

**Galapagos Distribution:** Española, Fernandina, Floreana, Genovesa, Marchena, San Cristóbal, Santa Cruz.

**References:** Chapman, R.F. et al. (2000), Dirsh, V.M. et al. (1969), Hebard, M. et al. (1920), Linsley, E.G. et al. (1977), Linsley, E.G. et al. (1966), Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).

36. *Schistocerca melanocera* (Stål, 1860)

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Schistocerca minor*, *Schistocerca pallida*, *Schistocerca lineata*, *Schistocerca immaculata*, *Schistocerca intermedia*, *Schistocerca borealis*

**Origin:** Native, Endemic.

**Galapagos Distribution:** Fernandina, Floreana, Genovesa, Isabela, Marchena, Pinta, Pinzón, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Chapman, R.F. et al. (2000), Dirsh, V.M. et al. (1969), Hebard, M. et al. (1920), Hickin, N. et al. (1979), Linsley, E.G. et al. (1977), Linsley, E.G. et al. (1966), Parkin, P. et al. (1972), Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).

37. *Sphingonotus fuscoirroratus* (Stål, 1860)

**Taxon status:** Accepted name; taxon occurs in Galapagos.

Syn.: *Sphingonotus tetranesiotes*, *S. tetranesiotes tetranesiotes*, *S. tetranesiotes barringtonensis*, *S. tetranesiotes hoodensis*, *S. tetranesiotes indefatigabilensis*, *S. trinesiotes*, *S. trinesiotes trinesiotes*, *S. trinesiotes indefatigabilensis*, *S. trinesiotes albemarlensis*

**Origin:** Native, Endemic.

**Galapagos Distribution:** Española, Fernandina, Floreana, Isabela, Pinta, San Cristóbal, Santa Cruz, Santa Fé, Santiago.

**References:** Dirsh, V.M. et al. (1969), Hebard, M. et al. (1920), Linsley, E.G. et al. (1977), Peck, S.B. et al. (1996), Peck, S.B. et al. (2001).

38. *Sphingonotus tetranesiotes albemarlensis* Snodgrass, 1902

**Taxon status:** Accepted name; taxon occurs in Galapagos.

**Origin:** Native, Endemic.

**Galapagos Distribution:** Isabela.

**References:** Linsley, E.G. et al. (1966).

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#### **Disclaimer**

The Charles Darwin Foundation Galapagos Species Checklist is a continuously updated list of all species currently known from the Galapagos Islands and reflects up-to-date knowledge compiled by scientists of the Charles Darwin Foundation (CDF) in collaboration with experts from around the world. CDF shares this data publicly and invites comments, corrections and additions.

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