

# CDF Checklist of Galapagos Ants, bees, wasps and related groups

John M. Heraty, Henri W. Herrera

**Last updated:** 01 Mar 2013

## Abstract

This Checklist of Galapagos Ants, bees, wasps and related groups includes a total of all 78 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 Ants, bees, wasps and related groups currently known.

The **Hymenoptera** are among largest orders of insects, comprising diverse groups like sawflies, wasps, bees, termites, and ants.

The name refers to their transparent wings, from the Greek *hymen* meaning “membrane” and *pteron* meaning “wing”.

## Methods

This checklist of all known Galapagos Ants, bees, wasps and related groups 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Species Checklists represent the synthesis of many different records: literature citations, data from previously unpublished reports (grey literature), specimen records of natural history collections located in Galapagos and all over the world.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:** 78 (65 accepted, 1 unidentified taxon, 2 doubtful, 4 preliminary identification, 4 problematic, 2 new to science).

**Origin of the taxa included:** 55 accidental, 1 questionable accidental, 3 questionable native, 6 endemic, 2 questionable endemic.

1. *Adelomyrmex myops* (Wheeler, 1910)

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Isabela.

**References:** Causton, C. et al. (2008), Herrera, H.W. et al. (2008).

2. *Anagyrus trinidadensis* (Kerrich, 1953)

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

Syn.: *Apoanagyrus trinidadensis* (Kerrich, 1953)

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

**References:** Causton, C. et al. (2008), Peck, S.B. et al. (1998).

3. *Anthidium vigintiduopunctatum* Friese

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Unknown.

**References:** Gonzalez, V.H. et al. (2009).

4. *Aphytis acutaspidis* Rosen & DeBach, 1979

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

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

5. *Brachygastra lecheguana* (Latreille, 1824)

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** San Cristóbal.

**References:** Causton, C. et al. (2008), Peck, S.B. et al. (1998), Peck, S.B. et al. (1996), Roque-Albelo, L. et al. (1999).

6. *Brachymeria cabira* (Walker, 1838)

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

**Origin:** No Data.

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

7. *Brachymeria funscolombi* (Dufoni)

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

**Origin:** No Data.

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

8. *Brachymyrmex heeri* Forel, 1874

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

**Origin:** Introduced, Accidental.

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

**References:** Causton, C. et al. (2008), Herrera, H.W. et al. (2008).

9. *Camponotus conspicuus zonatus* Emery, 1894

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

**Origin:** Introduced, Accidental.

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

10. *Camponotus macilentus* F. Smith, 1877

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

**Origin:** Native, Endemic.

**Galapagos Distribution:** Fernandina, Isabela, Marchena, Pinta, Santa Cruz, Santiago.

**References:** Jaramillo, P. et al. (2005), McMullen, C.K. et al. (2010), McMullen, C.K. et al. (2011), Stitz, H. et al. (1932), von Aesch, L. et al. (2005).

11. *Camponotus planus* F. Smith, 1877

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

**Origin:** Native, Endemic.

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

**References:** Jaramillo, P. et al. (2010), Stitz, H. et al. (1932), von Aesch, L. et al. (2005).

12. *Cardiocondyla emeryi* Forel, 1881

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

*Cardiocondyla emeryi* Forel, 1881: 5 (w.) VIRGIN IS. AndrÃ©, 1881b: 69 (m.); Forel, 1904f: 422 (q.); Emery, 1909a: 26 (m. ergatoid m., not q.); Arnold, 1916: 201 (q.). Senior synonym of *nereis*: Wilson & Taylor, 1967: 53; of *monilicornis*: Baroni Urbani, 1973: 200; of *mahdii*, *mauritii*, *rasalamae*: Bolton, 1982: 312. See also: Smith, M.R. 1944a: 33; Kugler, J. 1984: 3; Seifert, 2003a: 276. Current subspecies: nominal

plus fezzanensis.

**Origin:** Introduced, Accidental.

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

**References:** Lubin, Y.D. et al. (1984), von Aesch, L. et al. (2005).

13. *Cardiocondyla minutior* Forel, 1899

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

**Origin:** Introduced, Accidental.

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

14. *Cardiocondyla nuda* (Mayr, 1866)

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

**References:** von Aesch, L. et al. (2005).

15. *Centrodora mireyae* (DeSantis, 1981)

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

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

16. *Centrodora perkinsi* (Waterston, 1917)

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

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

17. *Cheiloneurus elegans* (Dalmon, 1820)

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

Syn.: *Cheiloneurus elegans elegantissimus* DeSantis, 1964

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

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

18. *Coccophagus rusti* Compere, 1928

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

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

19. *Conura femorata* (Fabricius, 1775)

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal.

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

20. *Crematogaster "JTL-022"*

**Taxon status:** Identification not yet confirmed.

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** San Cristóbal.

21. *Crematogaster curvispinosa* Mayr, 1862

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

**Origin:** Native, Accidental.

**Galapagos Distribution:** Santa Cruz.

22. *Cylindromyrmex whymeri* (Cameron, 1891)

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

Syn.: *Holcaponera whymeri* Cameron, 1891: 92, fig. (w.) ECUADOR. Combination in *Cylindromyrmex*: Forel, 1892f: 256. Junior synonym of *striatus*: Emery, 1901a: 54. Revived from synonymy and senior synonym of *schmidti*, *tibialis*, *williamsi*: De Andrade, 1998a: 596.

**Origin:** Introduced, Questionable Accidental.

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

23. *Cyphomyrmex nesiotus* Snelling & Longino, 1992

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

**Origin:** Native, Endemic.

**Galapagos Distribution:** Isabela.

24. *Cyphomyrmex rimosus* (Spinola, 1851)

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

**Origin:** Introduced, Accidental.

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

**References:** Causton, C. et al. (2008), Herrera, H.W. et al. (2008).

25. *Cyphomyrmex sp. nov. "hh04"*

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

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

26. *Diplazon laetatorius* Fabricius, 1781

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

**References:** Peck, S.B. et al. (1998), Peck, S.B. et al. (1996).

27. *Dorymyrmex pyramicus albemarlensis* Wheeler, 1919  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, No Data.  
**Galapagos Distribution:** Española, Fernandina, Genovesa, Isabela, Marchena, Pinta, Santa Cruz.  
**References:** Wheeler, W.M. et al. (1924), Wheeler, W.M. et al. (1933).
28. *Encarsia citrina* (Craw, 1891)  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Introduced, Accidental.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Peck, S.B. et al. (1998).
29. *Encarsia diaspidicola* (Silvestri, 1909)  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Introduced, Accidental.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Peck, S.B. et al. (1998).
30. *Encarsia pergandiella* Howard, 1907  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Introduced, Accidental.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Causton, C. et al. (2008), Peck, S.B. et al. (1998).
31. *Evania appendigaster* (Linnaeus, 1758)  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Introduced, Accidental.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Peck, S.B. et al. (1998), Peck, S.B. et al. (1996).
32. *Hypoponera beebei* (Wheeler, 1924)  
**Taxon status:** Taxonomic status unresolved or unrevised.  
**Origin:** No Data.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Linsley, E.G. et al. (1966), Peck, S.B. et al. (1994), Peck, S.B. et al. (1994).
33. *Hypoponera opaciceps* (Mayr, 1887)  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Introduced, Accidental.  
**Galapagos Distribution:** Fernandina, Isabela, Santa Cruz.  
**References:** Peck, S.B. et al. (1994), Peck, S.B. et al. (1994).
34. *Hypoponera punctatissima* (Roger, 1859)  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

**References:** Causton, C. et al. (2008).

35. *Hypoconera* sp.

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

**Origin:** No Data.

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

**References:** Lubin, Y.D. et al. (1984), von Aesch, L. et al. (2005).

36. *Leptogenys* "jel-san"

**Taxon status:** Identification not yet confirmed.

**Origin:** Native, Questionable Endemic.

**Galapagos Distribution:** Santa Cruz.

37. *Leptogenys* sp. nov. "hh03"

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

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

38. *Macroteleia absona* Muesebeck, 1977

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

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

39. *Megachile timberlakei* Cockerell

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Unknown.

**References:** Rasmussen, C. et al. (2012).

40. *Monomorium destructor* (Jerdon, 1851)

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

**Origin:** Introduced, Accidental.

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

**References:** Causton, C. et al. (2008), von Aesch, L. et al. (2005).

41. *Monomorium floricola* (Jerdon, 1851)

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

**Origin:** Introduced, Accidental.

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

**References:** Causton, C. et al. (2008), Linsley, E.G. et al. (1966), Lubin, Y.D. et al. (1984), McMullen, C.K. et al. (2011), Palacios, R.A. et al. (1975), Peck, S.B. et al. (1994), Peck, S.B. et al. (1998), Peck, S.B. et al. (1996), von Aesch, L. et al. (2005), Wheeler, W.M. et al. (1924).

42. *Monomorium pharaonis* Linnaeus, 1758  
**Taxon status:** Taxonomic status unresolved or unrevised.  
**Origin:** No Data.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Linsley, E.G. et al. (1966), Peck, S.B. et al. (1998), Peck, S.B. et al. (1996).
43. *Nylanderia fulva nesiotis* Wheeler, 1919  
**Taxon status:** Taxonomic status unresolved or unrevised.  
Prenolepis fulva Mayr, 1862: 698 (w.q.) BRAZIL. Forel, 1891b: 94 (m.); Forel, 1912i: 67 (m.). Combination in Pr. (Nylanderia): Forel, 1908b: 67; in Paratrechina (Nylanderia): Emery, 1925b: 222; in Nylanderia: Kempf, 1972a: 166; in Paratrechina: Snelling, R.R. & Hunt, 1976: 122; in Nylanderia: LaPolla, Brady & Shattuck, 2010a: 127. Senior synonym of fumata: Wild, 2007b: 45. See also: Fernández, 2000: 146; Fox, et al. 2010: 795. Current subspecies: nominal plus biolleyi, cubana, fumatipennis, incisa, longiscapa, nesiotis.  
**Origin:** No Data.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Wheeler, W.M. et al. (1933).
44. *Odontomachus bauri* Emery, 1892  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Introduced, Questionable Native.  
**Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz.  
**References:** Linsley, E.G. et al. (1966), von Aesch, L. et al. (2005).
45. *Odontomachus ruginodis* Smith, 1937  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Introduced, Accidental.  
**Galapagos Distribution:** Santa Cruz.
46. *Odynerus galapagensis* Williams, 1926  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Native, Endemic.  
**Galapagos Distribution:** Isabela.  
**References:** Abedrabbo, S. et al. (1991), Arnaud, P. H. Jr. et al. (1970), Linsley, E.G. et al. (1966), Williams, F.X. et al. (1926).
47. *Orasema costaricensis* Wheeler & Wheeler, 1937  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Introduced, Accidental.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Peck, S.B. et al. (1998).
48. *Paratrechina longicornis* (Latreille, 1802)  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Origin:** Introduced, Accidental.  
**Galapagos Distribution:** Española, Floreana, Isabela, San Cristóbal, Santa Cruz.



**References:** Jaramillo, P. et al. (2005), Linsley, E.G. et al. (1966), McMullen, C.K. et al. (2010), von Aesch, L. et al. (2005), Wheeler, W.M. et al. (1933).

49. *Paratrechina steinheili* (Forel, 1893)

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

**Origin:** Introduced, Accidental.

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

50. *Paratrechina vaga* (Forel, 1901)

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

**Origin:** Introduced, No Data.

**Galapagos Distribution:** Santa Cruz.

51. *Pheidole "hh01"*

**Taxon status:** Identification not yet confirmed.

**Origin:** No Data.

**Galapagos Distribution:** Santa Cruz.

52. *Pheidole aff. megacephala* (Fabricius, 1793)

**Taxon status:** Identification not yet confirmed.

**Origin:** Introduced, Accidental.

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

**References:** Mueller-Dombois, D. et al. (1987).

53. *Pheidole cf. williamsi* Wheeler, 1919

**Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.

**Origin:** No Data.

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

54. *Pheidole flavens* Roger, 1863

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

**Origin:** Introduced, Accidental.

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

55. *Pheidole williamsi* Wheeler, 1919

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

**Origin:** Native, Endemic.

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

**References:** Linsley, E.G. et al. (1966), Lubin, Y.D. et al. (1984).

56. *Polistes versicolor* (Oliver, 1791)

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Floreana, Isabela, San Cristóbal.

**References:** Abedrabbo, S. et al. (1991), Causton, C. et al. (2008), McMullen, C.K. et al. (2011), Peck, S.B.

et al. (1994), Peck, S.B. et al. (1998), Peck, S.B. et al. (1996), Peck, S.B. et al. (1994), Roque-Albelo, L. et al. (1999).

57. *Pteroptrix albifemur* (Girault, 1915)

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

**Syn.:** Archenomus imitatrix (Fullaway)

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

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

58. *Pyramica membranifera* (Emery, 1869)

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

**References:** Causton, C. et al. (2008), Herrera, H.W. et al. (2008).

59. *Rogeria curvipubens* Emery, 1894

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

**Origin:** Introduced, Accidental.

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

**References:** Causton, C. et al. (2008), Herrera, H.W. et al. (2008).

60. *Sceliphron caementarium* (Drury, 1773)

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

**References:** Causton, C. et al. (2008).

61. *Solenopsis geminata* (Fabricius, 1804)

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

**Origin:** Introduced, Accidental.

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

**References:** Causton, C. et al. (2008), Herrera, H.W. et al. (2008), Lubin, Y.D. et al. (1984), Peck, S.B. et al. (1998), Peck, S.B. et al. (1996), Pezzatti, P. et al. (1998), Roque-Albelo, L. et al. (1999), von Aesch, L. et al. (2005), Wheeler, W.M. et al. (1919).

62. *Solenopsis globularia pacifica* Wheeler, 1919

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

**Origin:** Introduced, Questionable Native.

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

**References:** Linsley, E.G. et al. (1966), von Aesch, L. et al. (2005), Wheeler, W.M. et al. (1924).

63. *Solenopsis gnoma* Pacheco, Herrera & Mackay, 2007

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

**Origin:** Native, Questionable Endemic.

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

**References:** Pacheco, J. et al. (2007).

64. *Spalangia cameroni* Perkins, 1910

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

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

65. *Spalangia drosophilae* Ashmead, 1887

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

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

66. *Spalangia endius* Walker, 1839

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

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

67. *Strumigenys emmae* (Emery, 1890)

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Floreana, Isabela.

68. *Strumigenys louisianae* Roger, 1863

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

**Origin:** Introduced, Accidental.

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

**References:** von Aesch, L. et al. (2005).

69. *Tapinoma melanocephalum* (Fabricius, 1793)

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

**Origin:** Introduced, Accidental.

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

**References:** Linsley, E.G. et al. (1966), Lubin, Y.D. et al. (1984), McMullen, C.K. et al. (2011), Peck, S.B. et al. (1998), Peck, S.B. et al. (1996), von Aesch, L. et al. (2005), Wheeler, W.M. et al. (1924).

70. *Tetramorium bicarinatum* (Nylander, 1846)

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

**Origin:** Introduced, Accidental.

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

Santiago.

**References:** Causton, C. et al. (2008), von Aesch, L. et al. (2005).

71. *Tetramorium caldarium* (Roger, 1857)

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Floreana.

**References:** von Aesch, L. et al. (2005).

72. *Tetramorium cf. lanuginosum* Mayr, 1810

**Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

73. *Tetramorium lanuginosum* Mayr, 1870

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

**Origin:** Introduced, Accidental.

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

74. *Tetramorium simillimum* (F. Smith, 1851)

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

**Origin:** Introduced, Accidental.

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

**References:** Linsley, E.G. et al. (1966), Lubin, Y.D. et al. (1984), Peck, S.B. et al. (1998), Peck, S.B. et al. (1996), von Aesch, L. et al. (2005), Wheeler, W.M. et al. (1933).

75. *Trissolcus teretis* Johnson

**Taxon status:** Taxonomic status unresolved or unrevised.

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** Santa Cruz.

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

76. *Venturia canescens* Gravenhorst, 1829

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

**Origin:** Introduced, Accidental.

**Galapagos Distribution:** San Cristóbal.

**References:** Peck, S.B. et al. (1998), Peck, S.B. et al. (1996).

77. *Wasmannia auropunctata* (Roger, 1863)

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

**Origin:** Introduced, Accidental.

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

**References:** Atkinson, I. A. E. et al. (1987), Causton, C. et al. (2008), Causton, C.E. et al. (2005), Herrera, H.W. et al. (2008), Linsley, E.G. et al. (1977), Lubin, Y.D. et al. (1984), McMullen, C.K. et al. (2010), Peck, S.B. et al. (1998), Peck, S.B. et al. (1996), Peck, S.B. et al. (1986), Peck, S.B. et al. (1996), Peck, S.B. et al.

(1986), Roque-Albelo, L. et al. (1999), von Aesch, L. et al. (2005).

78. *Xylocopa darwini* Cockerell, 1926

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

**Origin:** Native, Endemic.

**Galapagos Distribution:** Floreana, Isabela.

**References:** Abedrabbo, S. et al. (1991), Cockerell, T.D.A. et al. (1935), Helsen, P. et al. (2008), Jaramillo, P. et al. (2010), Jaramillo, P. et al. (2010), Linsley, E.G. et al. (1966), McMullen, C.K. et al. (1987), McMullen, C.K. et al. (2010), McMullen, C.K. et al. (2011), Parkin, P. et al. (1972).

### Acknowledgements

We are grateful for the financial report received for this project. Please refer to the website ([www.darwinfoundation.org/datazone/checklist/](http://www.darwinfoundation.org/datazone/checklist/)) for a detailed list of all our donors.

This checklist would not be possible without adjunct and collaborating scientists, and volunteers of the Charles Darwin Foundation. The following scientists and volunteers have contributed to the CDF Checklist of Galapagos Ants, bees, wasps and related groups: Sandra Abedrabbo, Léon L. Baert, Fabián Bersosa, Ruth Boada, Carolina Calderon, Charlotte Causton, Daniel Cherix, David Clarck, Germania Estévez, Lilian Guzmán, John M. Heraty, María T. Lasso, Maria Piedad Lincango, E. G. Linsley, Yale Lubin, Alejandro Mieves, Renato Oquendo, Christine E. Parent, Stewart B. Peck, Helmut W. Rogg, Lázaro Roque-Álbelo, Robert Silberglied, Leslie Usinger.

### References

1. Abedrabbo, S. (1991) *Nueva Avispa Introducida en las Islas*. Carta Informativa 31: 4.
2. Arnaud, P. H. Jr. (1970) *Lists of the scientific publications and insect taxa described by Francis Xavier Williams (1882-1967)*. Occas. Pap. Calif. Acad. Sci. 80: 1-33.
3. Atkinson, I. A. E. (1987) *Algunas consideraciones sobre la cartografía y clasificación de la vegetación en las Islas Galápagos*. Memorias. Taller de Investigación Botánica y Manejo en Galápagos. Pg. 114- 131.
4. Causton, C., Sevilla, C. (2008) *Latest Records of Introduced Invertebrates in Galapagos and Measures to control them*. Galapagos Report 2006-2007, CDF, GNP and INGALA, Puerto Ayora, Galapagos, Ecuador, p. 142-145.
5. Causton, C.E., Sevilla C. & Porter S.D. (2005) *Eradication of the little fire ant, *Wasmannia auropunctata* from Marchena Island, Galápagos on the edge of success?* Fla. Entomol 88: 159–168.
6. Cockerell, T.D.A. (1935) *The Templeton Crocker Expedition of the California Academy of Sciences, 1932. No. 28 The Carpenter Bees of the Galapagos Islands*. Proc. Calif. Acad. Sci., Fourth Series, 21(28): 379-382.
7. Gonzalez, V.H., Koch, J.B. & Griswold, T. (2009) *Anthidium vigintiduopunctatum Friese (Hymenoptera: Megachilidae): the elusive ‘dwarf bee’ of the Galapagos Archipelago?* Biological Invasions DOI 10.1007/s10530-009-9651-9
8. Helsen, P., Verdyck, P., Tye, A., Van Dongen, S. (2008) *Low levels of genetic differentiation between *Opuntia echios* varieties on Santa Cruz (Galápagos)* Springer-Verlag. 2009

9. Herrera, H.W., Longino, J.T. (2008) *New records of introduced ants (Hymenoptera; Formicidae) in the Galapagos Islands*. Galapagos Research 65: 16-19.
10. Herrera, H.W., Causton, C.E. (2008) *Distribution of Fire Ants Solenopsis geminata and Wasmannia auropunctata (Hymenoptera: Formicidae) in the Galapagos Islands*. Galapagos Research 65: 11-14.
11. Jaramillo, P., Reyes, D. & Yáñez, P. (2005) *Arthropods in the Charles Darwin Research Station herbarium, Galápagos, during 1999-2001*. GALAPAGOS RESEARCH. Noticias de Galápagos. 63: 23-25.
12. Jaramillo, P., Trigo, M. M., Ramírez, E. & Mauchamp, A. (2010) *Insect Pollinators of Jasminocereus thouarsii, an endemic cactus of the Galapagos Islands*. Galapagos Research 67: 21-25.
13. Jaramillo, P., Atkinson, R. (2010) *Evaluating Genetic Diversity for the Conservation of the Threatened Galápagos Endemic Calandrina galapagosa (Portulacaceae)* Biotropica. The journal, of Tropical, Biology and Conservation
14. Linsley, E.G., Usinger, R.L. (1966) *Insects of the Galápagos Islands*. Proceedings of the California Academy of Sciences Fourth Series 33(7): 113-196.
15. Linsley, E.G. (1977) *Insects of the Galápagos (Supplement)*. Occasional Papers of the California Academy of Sciences 125: 1-50.
16. Lubin, Y.D. (1984) *Changes in the native fauna of the Galápagos Islands following invasion by the little red fire ant, Wasmannia auropunctata*. Biological Journal of the Linnean Society 21(1-2): 229-242.
17. McMullen, C.K. (1987) *Biología reproductiva de las Angiospermas de las Islas Galápagos*. Pg. 39 - 52. Memorias: Taller sobre investigación Botánica y manejo en galápagos.
18. McMullen, C.K. (2010) *Nocturnal and diurnal pollination of Clerodendrum molle (Verbenaceae) in the Galápagos Islands* Plant Syst Evol (2011) 292:15-23
19. McMullen, C.K. (2011) *Pollination of the heterostylos Galápagos native, Cordia lutea (Boraginaceae)* Plant Syst Evol (2012) 298:569-579
20. Mueller-Dombois, D., Loope, L. (1987) *Algunos Aspectos Ecológicos unicos en Ecosistemas de Islas Oceánicas*. Memorias Taller sobre investigación Botánica y manejo en Galápagos. Pg. 24-32.
21. Pacheco, J., Herrera, H.W. & Mackay, W. (2007) *A new species of Thief Ant of the Genus Solenopsis from the Galápagos Islands (Hymenoptera: Formicidae)*. Sociobiology 50(3): 1075-1086.
22. Palacios, R.A., Bravo, L.D. (1975) *Estudio morfologico de las semillas de Prosopis, II: Algunas especies Norteamericanas y Neotropicales*. Darwiniana 19(2-4): 357-372.
23. Parkin, P., Parkin D.T., Ewing, A.W. & Ford, H.A. (1972) *A report on the arthropods collected by the Edinburgh University Galapagos Islands Expedition, 1968*. The Pan-pacific Entomologist 48: 100-107.
24. Peck, S.B., Kukalova-Peck J. (1986) *Preliminary summary of the subterranean fauna of the galapagos islands, Ecuador. Part II. The insects, evolution, and biogeography*. Proc. 9th Intl. Congr. Speleology, Barcelona 2: 166-169.
25. Peck, S.B., Peck, J. (1986) *The Galapagos Islands. Volcanic caves and cave fauna of the Galapagos Islands*. The Canadian Caver 18(1): 42-49.

26. Peck, S.B. (1994) *Aerial dispersal of insects between and to islands in the Galápagos archipelago, Ecuador*. *Annls. Entomol. Soc. Am.* 87(2): 218-224.
27. Peck, S.B. (1994) *Sea-surface (Pleuston) transport of insects between islands in the Galápagos archipelago, Ecuador*. *Annls. Entomol. Soc. Am.* 87(5): 576-582.
28. Peck, S.B. (1996) *Origin and development of an insect fauna on a remote archipelago: The Galápagos Islands, Ecuador*. In: Keast A., Miller S.E. (eds.): *The origin and evolution of Pacific Island biotas, New Guinea to eastern Polynesia: patterns and processes*. SPB Academic Publishing, Amsterdam, The Netherlands, p. 91-122.
29. Peck, S.B. (1996) *The arthropods of the allobiosphere (barren lava flows) of the Galapagos islands, Ecuador* *Noticias de Galápagos* 56: 9-12.
30. Peck, S.B., Heraty, J., Landry, B. & Sinclair, B.J. (1998) *Introduced insect fauna of an oceanic archipelago: The Galápagos Islands, Ecuador*. *Am. Entomol.* 44: 218-237.
31. Pezzatti, P., Irzan, T. & Cherix, D. (1998) *Ants (Hymenoptera, Formicidae) of Floreana lost paradise?* *Noticias de Galápagos* 59: 11–20.
32. Rasmussen, C. (2012) *Megachile timberlakei Cockerell (Hymenoptera: Megachilidae): Yet another adventive bee species to the Galapagos Archipelago* *The pan-Pacific Entomologist* 88(1):98–102
33. Roque-Albelo, L., Causton, C. (1999) *El niño and introduced insects in the galápagos islands: different dispersal strategies, similar effects*. *Noticias de Galápagos* 60: 30-36.
34. Stitz, H. (1932) *The Norwegian Zoological Expedition to the Galapagos Islands 1925, Conducted by Alf Wollebæk. 5. Formicidae*. *Med. Zool. Mus., Oslo* 31: 367-372.
35. Wheeler, W.M. (1919) *Expedition of the California Academy of Sciences to the Galapagos Islands, 1905-1906. Part 15. The ants of Cocos Island*. *Proc. Calif. Acad. Scs., 4th Series* 2(2): 299-308.
36. Wheeler, W.M. (1924) *The Formicidae of the Harrison Williams Galapagos Expedition*. *Zoologica* 5(10): 101-122.
37. Wheeler, W.M. (1933) *The Templeton Crocker Expedition of the California Academy of Sciences, 1932. No. 6 Formicidae of the Templeton Crocker Expedition*. *Proc. Cal. Acad. Sc., Fourth Series* 21(6): 57-64.
38. Williams, F.X. (1926) *Expedition of the California Academy of Sciences to the Galapagos Islands, 1905-1906. XVIII. The bees and aculeate wasps of the Galapagos Islands*. *Proceedings of the California Academy of Sciences Fourth Series* 2(18): 347-357.
39. von Aesch, L., Cherix, D. (2005) *Introduced Ant Species and Mechanisms of Competition on Floreana Island (Galápagos, Ecuador) (Hymenoptera: Formicidae)*. *Sociobiology* 45(2): 463-481.

---

#### 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.

Please do not hesitate to contact us; your input is very welcome. However, please understand that additions, changes, and corrections will be posted at periodic intervals after thorough cross-referencing of all new data. As an independent international scientific organization, the Charles Darwin Foundation relies on funding from donors who support our work. Please contact us at [datazone@fcdarwin.org.ec](mailto:datazone@fcdarwin.org.ec) if you would like to support the Charles Darwin Foundation Galapagos Species Checklist and help make knowledge of Galapagos biodiversity more widely available.