CDF Checklist of Galapagos Phytopathogenic Fungi

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This checklist is automatically generated using Version 3.0 of the online database CDF Galapagos Species Checklist.

Pathogens known to cause diseases of Galapagos plants included in this checklist are so-called phytopathogenic fungi. Strictly speaking some are not true fungi, but have a similar growth form and ecology as true fungi. Some phytopathogenic fungi are endemic to Galapagos infecting only endemic or native plants. Uredo scalesiae for example is a rust fungus described from the endemic plant genus Scalesia. However, with the introduction of a wide variety of food crops new species of phytopathogenic fungi have also arrived in the archipelago.

These newly introduced species are often rather host specific, adapted to infect a particular plant species only. Generalists are relatively rare but have the potential to cause significant damage among the native flora. Even species expected not switch hosts can potentially be problematic: if they were introduced with a host plant that is a close relative of a Galapagos native it is possible that these pathogens may also infect the native species. Native species that were protected against diseases by the extreme geographical isolation of the archipelago are thus now subjected to new pathogens. Nevertheless, specific pathogens that only infect a particular plant can potentially be also very useful. If these species only infect a particular invasive plant they could potentially be used as a very effective biological control agent for this particular invasive species.

Currently a rust fungus is being investigated for biological control of the extremely invasive blackberry (Rubus nivea), a plant that is one of the worst transformers of the natural vegetation of the Galapagos highlands. This checklist of phytopathogenic fungi does not include other plant pathogens or parasites: Viruses, protozoans and bacteria that infect plants remain largely unknown, and invertebrates feeding on plants, although often also causing significant damage, are not necessarily parasites of a single host species only. Their ecological role is generally more complex. Some species for example have larvae that are plant parasites, but their adults no longer feed on the host plant.

For marine species distribution data cited in the CDF Galapagos Checklists refer to the five main bioregions of the archipelago (Far Northern, Northern, Western, South Eastern and the Elizabeth Bay Bioregion). For the terrestrial species the 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.

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

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.
Names of taxa included in this checklist: 79 (42 Accepted, 32 Unidentified Taxon, 2 Doubtful, 3 Preliminary Identification).


1. Actinocymbe sp. 1
   Taxon status: Taxon not identified to species, subspecies, form or variety.
   Origin: Native, Endemic.
   Galapagos Distribution: Santa Cruz.

2. Alternaria brassicae (Berk.) Sacc.
   Taxon status: Accepted name; taxon occurs in Galapagos.
   Index Fungorum: anamorphic Lewia
   Origin: Introduced, Accidental.
   Galapagos Distribution: San Cristóbal.

3. Asperisporium caricae (Speg.) Maubl.
   Taxon status: Accepted name; taxon occurs in Galapagos.
   Origin: Introduced, Accidental.
   Galapagos Distribution: Isabela, Santa Cruz.

4. Camillea obularia (Fr.) Laessøe, J.D. Rogers Lodge
   Taxon status: Identification not yet confirmed.
   Galapagos Distribution: Santa Cruz.

5. Cercoseptoria sp. 1
   Taxon status: Taxon not identified to species, subspecies, form or variety.
   Index Fungorum: anamorphic Mycosphaerella
   Origin: Native, Endemic.
   Galapagos Distribution: Santa Cruz.

6. Cercospora api (Fresen.) Fresen.
   Taxon status: Accepted name; taxon occurs in Galapagos.
   Index Fungorum: anamorphic Mycosphaerella
   Origin: Introduced, Cultivated.
   Galapagos Distribution: Floreana, Isabela.

7. Cercospora sp. 1
   Taxon status: Taxon not identified to species, subspecies, form or variety.
   Index Fungorum: anamorphic Mycosphaerella
   Origin: Native, Indigenous.
   Galapagos Distribution: Santa Cruz.
   References: Kiener, L.C. et al. (1834-70).

8. Cercospora sp. 2
   Taxon status: Taxon not identified to species, subspecies, form or variety.
   Origin: Native, Indigenous.
   Galapagos Distribution: Unknown.

9. Cerotelium fici (Castagne) Arthur
   Taxon status: Accepted name; taxon occurs in Galapagos.
   Origin: Introduced, Accidental.
Galapagos Distribution: Santa Cruz.

10. *Chaconia ingae* (Syd.) Cummins
    Taxon status: Accepted name; taxon occurs in Galapagos.
    Origin: Introduced, Accidental.
    Galapagos Distribution: Santa Cruz.

11. *Chaetothyrium sp. 1*
    Taxon status: Taxon not identified to species, subspecies, form or variety.
    Origin: Native, Endemic.
    Galapagos Distribution: Santa Cruz.

12. *Cladosporium sphaerospermum* Penz.
    Taxon status: Accepted name; taxon occurs in Galapagos.
    Index Fungorum: anamorphic Davidiella
    Origin: Native, Indigenous.
    Galapagos Distribution: Isabela, Santa Cruz.

13. *Claviceps sp. 1*
    Taxon status: Taxon not identified to species, subspecies, form or variety.
    Galapagos Distribution: Unknown.

14. *Coniothyrium sp. 1*
    Taxon status: Taxon not identified to species, subspecies, form or variety.
    Index Fungorum: anamorphic Leptosphaeria
    Origin: Native, Endemic.
    Galapagos Distribution: Isabela.

15. *Corynespora sp. 1*
    Taxon status: Taxon not identified to species, subspecies, form or variety.
    Index Fungorum: anamorphic Corynesporasca
    Origin: Introduced, Accidental.
    Galapagos Distribution: Isabela, San Cristóbal.

    Taxon status: The identification of this taxon or its occurrence in Galapagos is doubtful.
    Index Fungorum: anamorphic Gibberella
    Origin: Native, Indigenous.
    Galapagos Distribution: Santa Cruz.

17. *Fusicoccum sp. 1*
    Taxon status: Taxon not identified to species, subspecies, form or variety.
    Index Fungorum: anamorphic Diaporthe
    Origin: Native, Endemic.
    Galapagos Distribution: Santa Cruz.

18. *Glomerella cingulata* (Stoneman) Spauld. H. Schrenk
    Taxon status: Accepted name; taxon occurs in Galapagos.
    Origin: Introduced, Cultivated.
    Galapagos Distribution: Isabela.

19. *Gnomonia sp. 1*
    Taxon status: Taxon not identified to species, subspecies, form or variety.
    Origin: Introduced, Cultivated.
    Galapagos Distribution: Santa Cruz.
20. *Hemileia vastatrix* Berk. Broome

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

**Origin:** Introduced, Cultivated.

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

21. *Julella aviceniae* (Borse) K.D. Hyde

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

**Origin:** Native, Indigenous.

**IUCN Red List:** Data Deficient.

**Galapagos Distribution:** San Cristóbal.

22. *Kordyana celebensis* Gäum.

**Taxon status:** Accepted name; taxon occurs in Galapagos. possibly a synonym but nomen nudum?: *Kordyana cubensis*

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Isabela.

**References:** Barreto, R. W. et al. (1988).

23. *Lembosia sp. 1*

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

**Origin:** Native, Questionable Endemic.

**Galapagos Distribution:** Santa Cruz.

24. *Meliola sp. 1*

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

**Origin:** Native, Indigenous.

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

25. *Microsphaera diffusa* Cooke Peck

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

**Origin:** Introduced, Accidental.

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

26. *Mycosphaerella cruenta* Latham

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

**Origin:** Introduced, Cultivated.

**Galapagos Distribution:** Isabela.

27. *Mycosphaerella fijiensis* M. Morelet

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

**Origin:** Introduced, Cultivated.

**Galapagos Distribution:** San Cristóbal.


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

**Origin:** Introduced, Cultivated.

**Galapagos Distribution:** Isabela.

29. *Mycosphaerella musicola* R. Leach ex J.L. Mulder

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

**Origin:** Introduced, Cultivated.

**Galapagos Distribution:** San Cristóbal.

30. *Mycosphaerella sp. 1*

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

**Origin:** Native, Indigenous.

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

31. *Mycosphaerella tassiana* (De Not.) Johanson

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

**Origin:** Introduced, Cultivated.

**Galapagos Distribution:** Isabela.
32. Mycelovellosiella fulva (Cooke) Arx
   **Taxon status:** Accepted name; taxon occurs in Galapagos.
   **Index Fungorum:** anamorphic Mycosphaerella
   **Origin:** Introduced, Cultivated.
   **Galapagos Distribution:** Isabela, San Cristóbal, Santa Cruz.
   **References:** Kirk, P. (ed.) et al. (2010).

33. Mycelovellosiella sidarum (Petr. Cif.) Deighton
   **Taxon status:** Accepted name; taxon occurs in Galapagos.
   **Index Fungorum:** anamorphic Mycosphaerella
   **Origin:** Introduced, Accidental.
   **Galapagos Distribution:** Santa Cruz.
   **References:** Kirk, P. (ed.) et al. (2010).

34. Mycelovellosiella sp. 1
   **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   **Index Fungorum:** anamorphic Mycosphaerella
   **Origin:** Native, Endemic.
   **Galapagos Distribution:** Floreana, Isabela, San Cristóbal.
   **References:** Kirk, P. (ed.) et al. (2010).

35. Neottiosporina sp. 1
   **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   **Index Fungorum:** anamorphic Pezizomycotina
   **Origin:** Native, Indigenous.
   **Galapagos Distribution:** Isabela.
   **References:** Kirk, P. (ed.) et al. (2010).

36. Oidium sp. 1
   **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   **Index Fungorum:** anamorphic Erysiphe
   **Origin:** Native, Endemic.
   **Galapagos Distribution:** San Cristóbal.
   **References:** Kirk, P. (ed.) et al. (2010).

37. Passalora boldoae (N. Pons) U. Braun, Crous N. Pons
   **Taxon status:** Accepted name; taxon occurs in Galapagos.
   **Index Fungorum:** anamorphic Mycosphaerella
   **Origin:** Native, Indigenous.
   **Galapagos Distribution:** Santa Cruz.
   **References:** Kirk, P. (ed.) et al. (2010).

38. Passalora cf. iochromatis (Pat.) U. Braun
   **Taxon status:** The identification of this taxon or its occurrence in Galapagos is doubtful.
   **Index Fungorum:** anamorphic Mycosphaerella
   **Origin:** Native, Endemic.
   **Galapagos Distribution:** Santa Cruz.
   **References:** Kirk, P. (ed.) et al. (2010).

39. Passalora sp. 1
   **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   **Origin:** Native, Endemic.
   **Galapagos Distribution:** Unknown.

40. Passalora sp. 2
   **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   **Origin:** Native, Endemic.
   **Galapagos Distribution:** Floreana, Isabela, Santa Cruz.

41. Periconia byssoides (Petch) Samson, W. Gams H.C. Evans
   **Taxon status:** Accepted name; taxon occurs in Galapagos.
Index Fungorum: anamorphic Pleosporales

**Origin:** Native, Indigenous.

**Galapagos Distribution:** Isabela.

**References:** Kirk, P. (ed.) et al. (2010).

42. *Periconia manihoticola* (Vincens) Viégas
   **Taxon status:** Accepted name; taxon occurs in Galapagos.
   Index Fungorum: anamorphic Pleosporales
   **Origin:** Introduced, Accidental.
   **Galapagos Distribution:** Santa Cruz.
   **References:** Kirk, P. (ed.) et al. (2010).

43. *Phoma sp. 1*
   **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   Index Fungorum: anamorphic Pleosporales; P. Cannon: not identical with the Phoma sp. on C. papaya in Brasil
   **Origin:** Introduced, Accidental.
   **Galapagos Distribution:** Floreana, Isabela, Santa Cruz.
   **References:** Kirk, P. (ed.) et al. (2010).

44. *Phoma sp. 2*
   **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   Index Fungorum: anamorphic Pleosporales; P. Cannon: this species is not the anamorph of Leptosphaeria sacchari, a common pathogen on sugar
   **Origin:** Introduced, Accidental.
   **Galapagos Distribution:** Unknown.
   **References:** Kirk, P. (ed.) et al. (2010).

45. *Phoma sp. 3*
   **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   Index Fungorum: anamorphic Pleosporales
   **Origin:** Introduced, Accidental.
   **Galapagos Distribution:** Unknown.
   **References:** Kirk, P. (ed.) et al. (2010).

   **Taxon status:** Accepted name; taxon occurs in Galapagos.
   **Origin:** Native, Indigenous.
   **Galapagos Distribution:** Isabela.

47. *Phyllachora noblei* Chardón
   **Taxon status:** Accepted name; taxon occurs in Galapagos.
   **Origin:** Native, Indigenous.
   **Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz.

48. *Phyllachora sp. 1*
   **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   **Origin:** Native, Endemic.
   **Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz.

   **Taxon status:** Accepted name; taxon occurs in Galapagos.
   **Origin:** Native, Endemic.
   **Galapagos Distribution:** Isabela.

   **Taxon status:** Accepted name; taxon occurs in Galapagos.
   **Origin:** Native, Indigenous.
   **Galapagos Distribution:** Floreana, San Cristóbal, Santa Cruz.

51. *Phylactinia dalbergia* Piroz.
   **Taxon status:** Accepted name; taxon occurs in Galapagos.
52. *Phyllosticta hiratsukae* Togashi  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Index Fungorum:** anamorphic Guignardia  
**Origin:** Native, Indigenous.  
**Galapagos Distribution:** Santa Cruz.  
**References:** Kirk, P. (ed.) et al. (2010).

53. *Phyllosticta* sp. 1  
**Taxon status:** Taxon not identified to species, subspecies, form or variety.  
**Index Fungorum:** anamorphic Guignardia  
**Origin:** Native, Endemic.  
**Galapagos Distribution:** Santa Fé.  
**References:** Kirk, P. (ed.) et al. (2010).

54. *Pseudocercospora meibomiae* (Chupp) Deighton  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Index Fungorum:** anamorphic Mycosphaerella  
**Origin:** Native, Indigenous.  
**Galapagos Distribution:** Floreana, Santa Cruz.  
**References:** Kirk, P. (ed.) et al. (2010).

55. *Pseudocercospora purpurea* (Cooke) Deighton  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Index Fungorum:** anamorphic Mycosphaerella  
**Origin:** Native, Indigenous.  
**Galapagos Distribution:** San Cristóbal, Santa Cruz.  
**References:** Kirk, P. (ed.) et al. (2010).

56. *Pseudocercospora rhizophorae* (Creager) U. Braun R.F. Castañeda  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Index Fungorum:** anamorphic Mycosphaerella  
**Origin:** Native, Indigenous.  
**Galapagos Distribution:** Isabela.  
**References:** Kirk, P. (ed.) et al. (2010).

57. *Pseudocercospora* sp. 1  
**Taxon status:** Taxon not identified to species, subspecies, form or variety.  
**Index Fungorum:** anamorphic Mycosphaerella  
**Origin:** Native, Indigenous.  
**Galapagos Distribution:** Floreana, San Cristóbal.  
**References:** Kirk, P. (ed.) et al. (2010).

58. *Pseudocercospora trichophila* (Davis) U. Braun  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Index Fungorum:** anamorphic Mycosphaerella  
**Origin:** Native, Indigenous.  
**Galapagos Distribution:** Floreana, Isabela.  
**References:** Kirk, P. (ed.) et al. (2010).

59. *Pseudocercospora triumfettiae* (Syd.) Deighton  
**Taxon status:** Accepted name; taxon occurs in Galapagos.  
**Index Fungorum:** anamorphic Mycosphaerella  
**Origin:** Native, Indigenous.  
**Galapagos Distribution:** Isabela.  
**References:** Kirk, P. (ed.) et al. (2010).

60. *Pseudoperonospora cubensis* (Berk. M.A. Curtis) Rostovzev  
**Taxon status:** Identification not yet confirmed.  
**Origin:** Introduced, Cultivated.
Galapagos Distribution: San Cristóbal.

61. *Puccinia lantanae* Farl.
   **Taxon status:** Accepted name; taxon occurs in Galapagos.
   **Origin:** Introduced, Accidental.
   **Galapagos Distribution:** Floreana.

   **Taxon status:** Accepted name; taxon occurs in Galapagos.
   **Origin:** Introduced, Cultivated.
   **Galapagos Distribution:** Santa Cruz.

63. *Puccinia mogiphanis* Arthur
   **Taxon status:** Identification not yet confirmed.
   **Origin:** Native, Indigenous.
   **Galapagos Distribution:** Santa Cruz.

64. *Puccinia sp. 1*
   **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   **Origin:** Native, Indigenous.
   **Galapagos Distribution:** Floreana, Isabela, San Cristóbal, Santa Cruz.

65. *Ramulariopsis gossypii* (Speg.) U. Braun
   **Taxon status:** Accepted name; taxon occurs in Galapagos.
   Index Fungorum: anamorphic Mycosphaerella
   **Origin:** Native, Endemic.
   **Galapagos Distribution:** Floreana.
   **References:** Kirk, P. (ed.) et al. (2010).

   **Taxon status:** Accepted name; taxon occurs in Galapagos.
   **Origin:** Native, Endemic.
   **Galapagos Distribution:** Santa Cruz.

67. *Sclerococcum sp. 1*
   **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   Index Fungorum: anamorphic Pezizomycotina
   **Galapagos Distribution:** San Cristóbal, Santa Cruz.

68. *Sepedonium sp. 1*
   **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   Index Fungorum: anamorphic Hypomyces
   **Galapagos Distribution:** Santa Cruz.
   **References:** Kirk, P. (ed.) et al. (2010).

69. *Septoria lantanae* Garman
   **Taxon status:** Accepted name; taxon occurs in Galapagos.
   Index Fungorum: anamorphic Mycosphaerella
   **Origin:** Introduced, Accidental.
   **Galapagos Distribution:** Floreana.
   **References:** Kirk, P. (ed.) et al. (2010).

70. *Septoria sp. 1*
   **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   **Origin:** Introduced, Accidental.
   **Galapagos Distribution:** Floreana, Isabela.
   **References:** Kirk, P. (ed.) et al. (2010).

71. *Stilbella sp. 1*
   **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   Index Fungorum: anamorphic Hypocreales
   **Galapagos Distribution:** Isabela.

72. *Stomiopeltis sp. 1*
   - **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   - **Origin:** Native, Endemic.
   - **Galapagos Distribution:** Santa Cruz.

73. *Taeniolella sp. 1*
   - **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   - **Index Fungorum:** anamorphic Glyphium
   - **Galapagos Distribution:** Isabela, Santa Cruz.

74. *Uredo scalesiae* Bonar
   - **Taxon status:** Accepted name; taxon occurs in Galapagos.
   - **Index Fungorum:** anamorphic Pucciniales
   - **Origin:** Native, Endemic.
   - **Galapagos Distribution:** Floreana, Isabela, Santa Cruz.

75. *Uredo sp. 1*
   - **Taxon status:** Taxon not identified to species, subspecies, form or variety.
   - **Origin:** Native, Indigenous.
   - **Galapagos Distribution:** Santa Cruz.

76. *Uromyces bidenticola* Arthur
   - **Taxon status:** Accepted name; taxon occurs in Galapagos.
   - **Origin:** Native, Indigenous.
   - **Galapagos Distribution:** Santa Cruz.

77. *Uromyces dolichosporus* Dietel Holw.
   - **Taxon status:** Accepted name; taxon occurs in Galapagos.
   - **Origin:** Native, Indigenous.
   - **Galapagos Distribution:** Floreana, Santa Cruz.

   - **Taxon status:** Accepted name; taxon occurs in Galapagos.
   - **Origin:** Native, Endemic.
   - **Galapagos Distribution:** Santa Cruz.

79. *Xylaria cubensis* (Mont.) Fr.
   - **Taxon status:** Accepted name; taxon occurs in Galapagos.
   - **Origin:** Native, Endemic.
   - **Galapagos Distribution:** Santa Cruz.

References:

