

<sup>1</sup>Biology Department, Science Faculty, Muğla Sıtkı Koçman University, Muğla, 48000 Turkey

<sup>2</sup>United States Department of Agriculture, Forest Service, Northern Research Station, Forestry Sciences Laboratory, Corvallis, Oregon 97331, USA

<sup>3</sup>Department of Forest Ecosystems and Society, Oregon State University, Corvallis, Oregon 97331, USA

Presenting author's email: aturkoglu@mu.edu.tr

Turkey has a potentially rich diversity of truffle taxa due to its unique phytogeographical location, climatic condition and vegetation cover. Many species of hypogeous fungi growing naturally in different regions of the country. (Figure 1). Studies of hypogeous fungi in Turkey, begun by Dr. A. Pilát in 1937 have so far revealed 79 species from 30 genera belonging to 21 families including 5 ascomycetes and 16 basidiomycetes. A list of Turkish truffles species and photos of some species are given below. (Figure 2).

This species richness is due to Turkey's combination of phytogeographical and climatic diversity, ranging from arid to wet lowlands to mountains rising well into alpine zones to foster a diversified vegetation and a similarly diversified mycota. Three phytogeographic regions (Euro-Siberian, Mediterranean and Irano-Turanian) intersect on the Anatolian Peninsula. Turkey divided to seven regions according to the geographical properties, and generally 4 climate types including Continental climate, Mediterranean climate, Black Sea climate and Marmara (transition) climate occur over these regions. All three phytogeographic regions and climate types combine to support 12,000 plant species, including 3000 endemics. The Black Sea region is generally characterized by forests of broadleaf trees (beech, chestnut, linden, oak, maple, alder) and conifers (larch, fir, pine, spruce and juniper), whereas the Mediterranean region is dominated by conifers (pine, fir, cedar and juniper). In the Aegean and Mediterranean regions, both moist and dry coniferous forests occur along with shrub and maquis communities. In central Anatolia the forests areas consist of oak, juniper, and larch (Figure 3). Because of the suitable climate and the type of vegetation, Turkey has a rich mycota. Studies about Turkish truffles are going on so the number of hypogeous fungi discovered in Turkey is increasing every year, often including new species.



Figure 1. Distribution of hypogeous fungi in Turkey

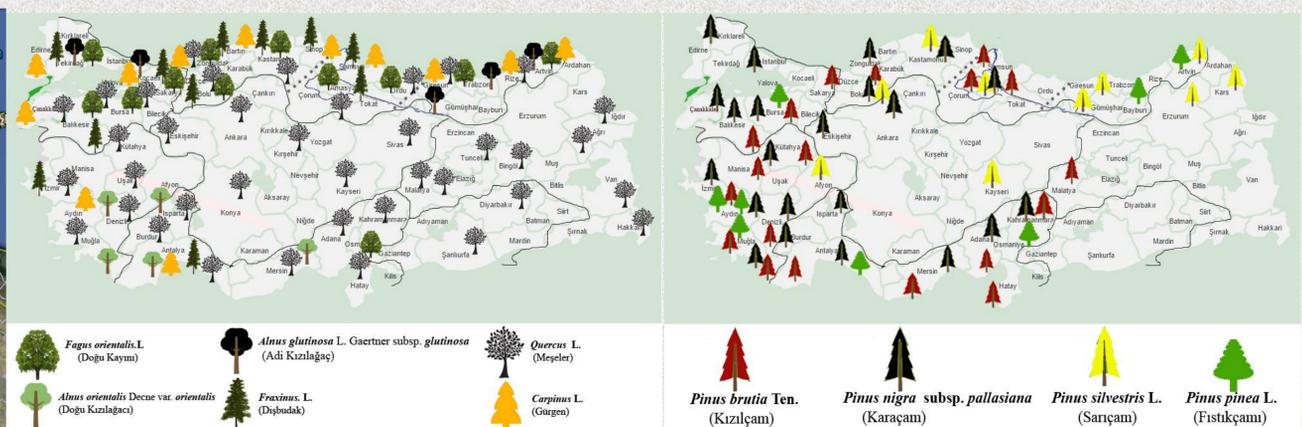


Figure 3. Distribution of mycorrhizal plants in Turkey

1. *Tuber mesentericum* Vittad.
2. *Tuber aestivum* Vittad.
3. *Tuber nitidum* Vittad.
4. *Tuber rufum* Pico
5. *Tuber excavatum* Vittad.
6. *Tuber brumale* Vittad.
7. *Tuber borchii* Vittad.
8. *Tuber ferrugineum* Vittad.
9. *Tuber puberulum* Berk. & Broome
10. *Choiromyces meandriformis* Vittad.
11. *Terfezia leptoderma* Tul. & C.Tul
12. *Terfezia olbiensis* Tulasne & C.Tulasne
13. *Terfezia arenaria* (Moris) Trappe
14. *Terfezia claveryi* Chatin
15. *Terfezia boudieri* Chatin
16. *Tirmania pinoyi* (Maire) Malençon
17. *Sarcosphaera coronaria* (Jacq.) J. Schröt
18. *Picoa juniperi* Vittad
19. *Picoa lefebvrei* (Pat.) Maire
20. *Genea verrucosa* Vittad.
21. *Genea klotzschii* Berk. & Broome
22. *Genea sphaerica* Tul. & C. Tul.
23. *Geopora cooperi* Harkn.
24. *Geopora arenicola* (Lév.)
25. *Geopora sumneriana* (Cooke) M.Torre
26. *Geopora arenosa* (Fuckel) S.Ahmad
27. *Stephensia bombycina* (Vittad.) Tul. & C.Tul.
28. *Elaphomyces leuocarpus* Vittad.
29. *Elaphomyces muricatus* Fr.
30. *Gymnomyces xanthosporus* (Hawker) A.H.Sm.
31. *Hymenogaster griseus* Vittad.
32. *Hymenogaster vulgaris* Tul. & C.Tul.
33. *Hymenogaster thwaitesii* Berk. & Broome
34. *Hymenogaster olivaceus* Vittad.
35. *Hymenogaster citrinus* Vittad.
36. *Hymenogaster hessei* Soehner
37. *Hymenogaster luteus* Vittad.
38. *Hymenogaster lycoperdineus* Vittad.
39. *Hymenogaster rehsteineri* Bucholtz
40. *Reddellomyces parvulosporus* (G.W. Beaton & Malajczuk) Trappe, Castellano & Malajczuk
41. *Reddellomyces westraliensis* (G.W. Beaton & Malajczuk) Trappe, Castellano & Malajczuk



Figure 2: Macroscopic and microscopic appearance of some hypogeous fungi from Turkey

42. *Melanogaster broomeanus* Berk.
43. *Melanogaster ambiguus* (Vittad.) Tul. & C. Tul.
44. *Melanogaster macrosporus* Velen
45. *Melanogaster variegatus* (Vittad.) Tul. & C. Tul.
46. *Alpova corsicus* P.-A. Moreau & F. Rich.
47. *Leucogaster nudus* (Hazsl.) Hollós
48. *Leucogaster tozzianus* (Cavara & Sacc.) Mattir. Ex Zeller & C.W. Dodge
49. *Leucogaster liosporus* R.Hesse,
50. *Leucogaster luteomaculatus* Zeller & C.W.Dodge,
51. *Leucophleps aculeatispora* Fogel
52. *Octaviania asterosperma* Vittad.
53. *Protoglossum aromaticum* (Velen.) J.M. Vidal
54. *Hysterangium clathroides* Vittad.
55. *Hysterangium epiroticum* Pacioni
56. *Hysterangium fragile* Vittad.
57. *Hysterangium nehrpticum* Berk.
58. *Hysterangium calcareum* R. Hesse
59. *Hysterangium inflatum* Rodway
60. *Gautieria otthii* Trog
61. *Gautieria retrugosa* Th. Fr.
62. *Gautieria trabutii* (Chatin) Pat.
63. *Gautieria graveolens* Vittad.,
64. *Gautieria monticola* Harkn.
65. *Descomyces albus* (Berk.) Bougher & Castellano
66. *Setchelliogaster tenuipes* (Setch.) Pouzar
67. *Chondrogaster pachysporus* Maire
68. *Hydnangium virescens* Quéll.,
69. *Rhizopogon luteolus* Fr.
70. *Rhizopogon roseolus* (Corda) Th.Fr
71. *Rhizopogon marchii* (Bres.) Zeller & C.W.Dodge,
72. *Rhizopogon ochraceorubens* A.H.Sm
73. *Rhizopogon fuscorubens* A.H. Sm.,
74. *Rhizopogon vulgaris* (Vittad.) M. Lange
75. *Torrendia pulchella* Bres.
76. *Chlorophyllum agaricoides* (Czern.) Vellinga
77. *Phallologaster saccatus* Morgan
78. *Sclerogaster compactus* (Tul. & C. Tul.) Sacc.
79. *Sclerogaster hysterangioides* (Tul. & C. Tul.) Zeller & C.W. Dodge

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