

Medicinal Mushrooms of the Russian Far East in Nature

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About 1500 species of Basidiomycetes occur in the forests of the Russian Far East. Approximately 160 species contain medicinal substances. Investigations on the production of fungal medicines and food supplements are not carried out in this region. Medicinal mushrooms, except for *Pleurotus* and *Agaricus*, are not cultivated for pharmacutic purposes, as well as for food.

Wild medicinal mushrooms are used only in folk medicine as preventive or curative remedies for stomach and pneumonia infections and cancers. Widespread mushrooms [*Coriolus versicolor* (L.: Fr.) Quel., *Inonotus obliquus* (Pers.) Pil., *I. hispidus* (Fr.) P. Karst., *Ganoderma applanatum* (Pers.) Pat., *Fomes fomentarius* (L.: Fr.) Gill., *Fomitopsis pinicola* (Fr.) P. Karst., *Daedaleopsis dickinsii* (Berk.) Bond., *Piptoporus betulinus* (Bull.: Fr.) P. Karst., *Laetiporus sulphureus* (Fr.) Bond. et Sing., *Polyporus squamosus* Fr., *Schizophyllum commune* Fr.: Fr.] producing numerous fruiting bodies are employed most frequently.

Auricularia auricula-judae (Bull.) Wettst., *A. polytricha* (Mont.) Sacc., *Armillariella mellea* (Vahl.: Fr.) P. Karst., *Pleurotus ostreatus* (Jacq.: Fr.) P. Kumm., *P. citrinopileatus* (Sing.) Sing., *P. salmoneostramineus* L. N.Vassil., *Cantharellus cibarius* Fr., *Hypsizygus tessulatus* (Bull.: Fr.) Sing., *Flammulina velutipes* (Curt.: Fr.) Sing., *Lepista nuda* (Bull.: Fr.) Cooke, and species of genera of *Oudemansiella*, *Lactarius*, *Russula*, *Suillus*, *Pholiota*, *Coprinus*, *Calvatia*, and *Lycoperdon* are collected for food.

Rare medicinal mushrooms that are included in the Red Book of Primorsky Territory are especially interesting.

Fruiting bodies of some species are scattered and do not appear in the same localities every year. *Ganoderma lucidum* (Curt.: Fr.) P. Karst. occurs on the wood of silver fir, pine, oak, birch, and ash trees everywhere from Kamchatka to Primorsky Territory, as well as in Kurils and Sakhalin Islands. *Grifola frondosa* (Dicks.: Fr.) S. F. Gray and *Dendropolyporus umbellatus* (Pers.: Fr.) Jul. inhabit the broad-leaved forests under oak in Primorsky and Khabarovsk Territories and the larch forests of Magadan region.

There are species known from both Primorsky and Khabarovsk Territories: *Tricholoma caligatum* (Viv.) Rick. forms many fruiting bodies once in 2 or 3 years under pine and oak; *Langermannia gigantea* (Pers.) Rostk. and *Dictyophora duplicata* (Bosc) E. Fisch. grows on soil in forests and meadows.

There are species found only in Primorsky Territory: *Tremella fuciformis* Berk. occurs on wood of deciduous trees only during warm and humid vegetation periods; *Hericiums erinaceus*. (Bull.: Fr.) Pers. and *H. coralloides* (Scop.: Fr.) Pers. form large groups of fruiting bodies every year on the wood of oak and birch; *Lentinus edodes* (Berk.) Sing. is reported on the logs of oak and lime trees.