

CONFIDENTIAL N 4

FINAL REPORT

**CRITICAL AND SYSTEMATIC STUDY OF ANATOMY,
MORPHOLOGY, CULTURAL PECULIARITIES, AND
TAXONOMY OF *GANODERMA* SP. "HYPHA TSUGAE"**

CONFIDENTIAL

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VII. CONCLUSIONS

In conclusion, *Ganoderma* sp. (Hypha tsugae) specimen under examination is close to *G. tsugae* in basic morphological, microscopic, and cultural traits. The giant cap measurements (in native specimens of *G. lucidum*-complex the maximal diameter of pileus was designated as 20 cm) and a slightly more intensively coloured flesh are most likely due to the fact that the specimen is a cultivated one. However, certain differences between the specimen in question and type material of *Ganoderma tsugae* occur, namely: 1) the presence of several laccate lines above the tube layer (similar phenomenon was observed by us on *G. tsugae* exsiccate; this can be explained as a result of initial morphogenetic disturbance); 2) more pronounced pillars and, consequently, finer spore ornamentation; 3) thicker spore wall; 4) consistently shorter and broader apex. This specimen seems to be also related to *G. resinaceum*, but sharply differs from the latter by smaller pores and thinner and softer context. All other species of *G. lucidum-resinaceum* complex clearly differ from the specimen in question.

Therefore, until further studies are done, we attribute the specimen of *Ganoderma* sp. (Hypha tsugae) to *G. tsugae*. Moreover, in view of the forenamed differences, we consider it to be a new variety of *Ganoderma tsugae*. However, a type specimen of any taxa, including a variety, must be from a natural locality and not from a culture, according to the rules of the International Code of Botanical Nomenclature (Greuter et al., 2000). Consequently, we currently leave the new variety as **nomen provisorum** until specimens from nature become available.

Below, the diagnosis of the new variety *G. tsugae* var. *jannie* is given. The name of the new variety is dedicated to Dr. Jannie Tay, who has been most interested in the study of this very important species.

Ganoderma tsugae Murrill var. *jannie* var. nov. [nomen provisorum]— Figs. 9-22.

Pilei pedicellatae orthopleuropodatae (pedunculus ca. 2.5 cm. diam.), incumbens, 35 cm. diam. et 0.5–2 cm crass., cupreobrunnei. Caro obscure bistratoso cum stratum superficiale lignoso-ochraceum et stratum medullare coffeatum, lineibus laccatibus penetratum. Tubuli unistratosae, coffeatae, cum 5–6 pores per mm. Systema hypharum trimiticum (hyphae inflatae pro more desunt). Hyphae generatoriae 20-60(>)x3-5 μm, hyphae sceleticae 40-120(>)x 3-7.5 μm, hyphae ligativae 2–4.5 μm. Pilocystidia 31-80x7.2-14 μm, clavatae, amyloideae. Basidia