

—抄録 (Abstract) —

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品質を考慮したタモギタケ品種の選抜

原田 陽, 宜寿次 盛生, 森 三千雄^{*1},
米山 彰造^{*2}, 五十嵐 啓蔵^{*3}, 富山 隆広^{*3}

Breeding of *Pleurotus cornucopiae* var. *citrinopileatus* for High Quality Fruiting Body Production

Akira HARADA, Seiki GISUSI, Michio MORI,
Shozo YONEYAMA, Keizo IGARASHI,
Takahiro TOMIYAMA

To select superior strains of *Pleurotus cornucopiae* var. *citrinopileatus* adaptable to practical cultivation systems, we analyzed the characteristics of hybrid strains, including productivity and quality of the fruiting bodies. By comparing with the characteristics of two parental strains, 5 out of 204 different hybrid strains were selected. In the principle component analysis of the coexistence ratio of fruiting bodies with warped pilei, soft lower parts of the stipes, and immature fruiting bodies, we found that three of the selected strains had lower ratios of immature fruiting bodies and fruiting bodies with warped pilei than the control strains, 87-2 and 98-3. The other two strains had a lower ratio of soft lower parts of the stipes than the first three selected strains. These findings indicate that the selected strains had improved characteristics compared to the parental strains. In the fruiting bodies of the five selected strains and one parental strain, we also investigated the content of taste components, such as free

amino acids and 5'-GMP. There was a significant difference in free amino acid and 5'-GMP contents among strains, indicating a significant difference in taste between strains. Finally, we performed repeat cultivation tests, and strain 291 was selected from the 5 selected strains for fruiting body production, as it produced fruiting bodies with high quality appearance.

Key words: *Pleurotus cornucopiae* var. *citrinopileatus*, fruiting body production, breeding, quality of fruiting body, principle component analysis

タモギタケ, 子実体生産, 育種, 子実体の品質, 主成分分析

生産施設における栽培に適応したタモギタケの優良品種を作出することを目的として, 交配菌株の生産性と子実体形質の評価により品種選抜を行った。交配親2菌株(対照)と比較し, 204の交配菌株の中から3次の選抜により5菌株を選抜した。子実体の形質評価に基づく主成分分析の結果から, 選抜菌株は対照品種より未熟子実体発生率と変形率が低かったこと, および柄下部軟率が高い3菌株と低い2菌株に分類されたことがわかり, 選抜菌株の形質的な優位性が示された。また対照を含めた6菌株の子実体について, 呈味成分である遊離アミノ酸およびグアニル酸含有量を分析した結果, 菌株間差が大きいことが示され, 食味の菌株間差が大きいことが推測された。5菌株の栽培試験の結果, 子実体の外観評価が高い菌株291が選抜された。

—きのこ部 品種開発科—

—*1: 網走西部森づくりセンター遠軽事務所—

—*2: きのこ部 生産技術科—

—*3: (株)スリービー—