

【論文】

Taste characterization of the fruit body derived from a novel strain belonging to the genus *Pleurotus* Yoshihito AZUMI^{1,3)}, Kaori DOI¹⁾, Kana KOGISO²⁾, Goro TAGUCHI³⁾, Makoto SHIMOSAKA³⁾, Kenji OUCHI¹⁾ and Satoshi INATOMI^{1)*}

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[Abstract]

The taste characteristics of a fruit body of the novel strain IC1, belonging to the genus *Pleurotus*, were compared with those of *P. ostreatus* and *P. eryngii* using a combination of quantitative analysis of taste compounds and sensory evaluation. The Glu and 5'-GMP contents of the IC1 fruit body were similar to those of *P. ostreatus*, while the trehalose content was significantly higher. Sensory evaluation showed that the IC1 broth was less bitter and sweeter than the *P. ostreatus* broth, with higher umami than the *P. eryngii* broth. The palatability score of the IC1 broth was significantly higher than that of the *P. ostreatus* and *P. eryngii* broths. Principal component analysis revealed that the taste characteristics of IC1 were clearly differentiated from the others in terms of a stronger taste and higher palatability. The higher contents of Ala, Gly and 5'-IMP suggested that these compounds contributed to the taste characteristics of IC1. Overall, IC1 is a superior strain with favorable taste characteristics originating from both *P. ostreatus* and *P. eryngii*. In addition, the techniques of quantitative analysis and sensory evaluation complement each other to provide an effective method for evaluating the taste characteristics of foods.

Key words: Palatability, *Pleurotus*, Principal component analysis, Sensory evaluation, Taste components

[摘要]

ヒラタケ属の品種改良で開発された新規菌株 (IC1) の嗜好特性についてエリンギおよびヒラタケと対比し、呈味成分の定量と官能評価を併用して評価した。呈味成分において、旨味を呈する Glu および 5'-GMP は、IC1 にヒラタケと同程度含まれ、Gly, Ala および 5'-IMP は、ヒラタケおよびエリンギと比べて IC1 で有意に高い値を示した。甘味を呈するトレハロースは IC1 において、ヒラタケよりも有意に高かったが、エリンギよりも有意に低かった。熱水抽出エキスでの官能評価において、IC1 はヒラタケと比べて甘味は強いが苦味が少ない、また、エリンギと比較して旨味が強いという特長がみられ、全体的なおいしさでは、IC1 はヒラタケ、エリンギより有意に高い評価が得られた。主成分分析を実施し、3種類のきのこの嗜好特性を検討した結果、味の濃さと甘味の強さ、全体的なおいしさで明確に区別することが出来た。その中で IC1 に多く含まれていた Gly, Ala および 5'-IMP が IC1 の呈味性に影響を及ぼしている可能性が考えられた。以上から、成分分析と官能評価を併用することによって、ヒラタケおよびエリンギが持つ長所を併せ

持つ優良な菌株であることが示された.