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Change of Flavor Characteristics of Flavor Oil Made Using Sarcodon aspratus (Sarcodon aspratus Berk. S. Ito) According to Extraction Temperature and Extraction Time

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Abstract : To develop an flavor oil using Sarcodon aspratus (Sarcodon aspratus Berk. S. Ito), infiltration extraction method was used to add dried mushroom flavor of Sarcodon aspratus to base olive oil. Edible base oil used during infiltration extraction was pressed olive oil, and infiltration extraction was done while varying extraction temperature to 20, 30, 40 and 50(℃) extraction time to 24 hours, 48 hours and 72 hours. Amount of Sarcodon aspratus added to base oil was 20% compared to 100% of base oil. Production yield of Sarcodon aspratus flavor oil decreased with increasing extraction frequency. Aroma intensity was 2195~2447 (A.U./1□), and it increased with increasing extraction temperature and extraction time. Chromaticity of Sarcodon aspratus flavor oil was bright pale yellow with pH of 4.5, sugar content of 71~72 (°Brix), and highest average turbidity of 16.74 (Haze %) shown by the 40℃ group. In the aromatic evaluation, increasing extraction temperature and extraction time resulted in increase of cheese aroma, savory sweet aroma and beef jerky aroma, as well as spicy taste comprised of slight bitter taste, savory taste and slight acrid taste, to make aromatic oil with unique flavor.

Keywords : Flavor Characteristics, Flavor Oil, Infiltration extraction method, mushroom, Sarcodon aspratus (Sarcodon aspratus Berk. S. Ito)
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