THE INVESTIGATION OF FATTY ACIDS AND MINERALS AT LACCARIA LACCATA FROM TURKEY

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Abstract

In today's world mushrooms are getting very important to the human life diet system. Mushrooms contain high amounts of protein, vitamins, fiber, carbohydrates, fatty acids, and minerals and also play an important role in the destruction of organic matter in the environment. Especially wild edible mushrooms have been used in many areas since ancient times, and popularity is increasing day by day.

Turkey has a wide range of wild-grown edible mushroom species and among some of them, a Laccaria laccata is a wild edible mushroom but unfortunately is not well known from the Yozgat’s urban people. In this study, 8 different fatty acids (C14: Miristic, C16: Palmitic, C16:1: Palmitoleic, C18: Stearic, C18:1: Oleic, C18:2: Linoleic, C22: Beneic, and C24:1: Nervonic acid) and 12 mineral were detected at Laccaria laccata species. According to results, Laccaria laccata includes the %0.34 C14, %21.80 C16, %0.45 C16:1, %5.46 C18, %46.85 C18:1, %24.22 C18:2, %0.44 C22, %0.43 C24:1 fatty acid types. And mineral contents were determined as follows; 797907 µg/kg-1 Mg, 119257 µg/kg-1 Al, 157201 µg/kg-1 Ca, 129816 µg/kg-1 Na, 700.52 µg/kg-1 Cr, 180.33 µg/kg-1 Mn, 132283.9 µg/kg-1 Fe, 159.36 µg/kg-1 Co, 630.88 µg/kg-1 Ni, 43529.76 µg/kg-1 Cu, 61408.05 µg/kg-1 Zn, and 9448.57 µg/kg-1 Cd. Among these mineral types, while some of them called trace elements such as Al, Cd, Cr, and Co but these elements generally were accumulated from pollution areas can be very threatful for human life, however except these materials they include very important minerals and fatty acids. Some of the fatty acids are not building at the human body and exactly should be taken from food. So, this mushroom species which are not collected from pollutant areas, are very healthy for human life and can be used as a food supplement and we want to awareness about this mushroom species with the beneficial ingredients with this study.

Key words: Laccaria laccata, fatty acids, minerals, Turkey.