

***Russula omiensis* sensu lato comprises at least four species!**

Yoshito Shimono¹⁾, Taiga Kasuya²⁾

¹⁾Graduate School of Bioresources, Mie University, Japan

²⁾Department of Biology, Keio University, Japan

Russula omiensis was originally described from Shiga Pref., central Honshu, Japan and its basidiomata usually grows in evergreen broad-leaved forests dominated by *Castanopsis* and *Quercus* spp. at low temperature from Late November to April. Caps of *R. omiensis* are dark reddish purple to yellowish purple with wine or dark in the center, and sometimes red and olive in color. Characteristics of this species are varied cap colors, very acrid lamellae and long fruiting period during low temperature climate. In Japan, *Russula* species sharing these characters have been treated as *R. omiensis* in lump though morphological variation of *R. omiensis* has been recognized. Therefore, *Russula* species currently identified as *R. omiensis* in Japan probably include several distinct species. Nevertheless, taxonomic reexamination and molecular phylogenetic studies on *R. omiensis* sensu lato have not been conducted yet. To rearrange the species taxonomy of *R. omiensis* sensu lato based on morphology and molecular phylogeny, specimens of the present species and several additional materials of *Russula* were collected from Japan, and morphological and molecular data were newly generated. Molecular phylogenetic analyses based on ITS region revealed the polyphyly of specimens morphologically identified as *R. omiensis* sensu lato. They were divided into at least four clades, which were morphologically and ecologically distinguishable. As above, these four clades were well supported by morphological and ecological features and therefore, each clade should be treated as independent species.