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Development of DNA Barcode Database and Identification System of Forest Mushrooms in Korea

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Over five thousand higher fungal specimens were collected from 32 forest areas of Chungcheong and Gyeongsang province from 2012 to 2013. We obtained 513 strains and 3,120 ITS sequences. Mushrooms were first identified with macro- and micro-scopic characters, and their identification was confirmed on the basis of ITS sequences. Voucher specimens were designated for each species found in Korea. Construction of DNA barcoding Database is currently underway with sequences of 409 species. During the development of the database, some new species were recognized, along with several Korean new records. When the system has been completed, it will provide essential molecular information for metagenomic and phylogenetic researches for higher fungi.

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