F819 Chromosomal localization of rDNA genes in *Lycoris* flavescens M. Kim & S. Lee (Amaryllidaceae)

Byong Soon Lee* and Mu Yeol Kim

* School of Life Science, Jeonju Univ.

Department of Biology, Chonbuk Natl. Univ.

The 18S, 5.8S, and 26S ribosomal RNA gene (rDNA) loci were detected directely on mitotic chromosomes of Lycoris flavescens using fluorescent in situ hybridization (FISH). The biotin labeled rDNA probe exhibits vellow fluorescent signals on six of the nineteen of L. flavesens that have metaphase chromosomes counterstained with propidium iodide. Of them four major signals were located at the distal end of telocentrics, and the other weak signals were associated with the nucleolus organizer region (NOR), respectively. This result is reported for the first time and offers new cytological markers in Lycoris.

F820 Korean population data on four tetrameric short tandem repeat loci - D18S1270, D14S608, D16S3253, and D21S1437 - derived using multiplex PCR amplification and manual typing

Murim Choi, Jun Hwan Kim, Dong Hoon Lee, and Hyune Mo Rho Department of Molecular Biology, Seoul National University

We present a Korean population study for four new tetrameric short tandem repeat (STR) loci employing multiplex PCR amplification, polyacrylamide gel electrophoresis of the PCR products and silver staining, which allow single base pair resolution and rapid typing. The loci were D18S1270, D14S608, D16S3253, and D21S1437. All loci met Hardy-Weinberg equilibrium in more than 100 unrelated Korean samples. This allelic frequency data can be used in forensic analysis and paternity tests to estimate the frequency of a multiplex PCR based DNA profile in the Korean population.