Complete Chloroplast Genome Sequence of Korean Endermic Species, *Pseudostellaria longipedicellata*

Yongsung Kim^{1,2,3}, Kyeong-In Heo^{1,2}, Sangtae Lee³ and Jongsun Park^{1,2}

¹Infoboss Co Ltd., Seoul, Korea

²Infoboss Research Center, Seoul, Korea

³Department of Biological Sciences, Sungkyunkwan University, Suwon, Korea

Pseudostellaria Pax (Caryophyllaceae) is a small genus distributed in temperate region. It consists of 25 species presenting high diversity in Asia. Pseudostellaria longipedicellata S. Lee, K. Heo & S. C. Kim was first announced as new species in 2012. Morphological characters of P. longipedicellata are closely related to those of Psedusotellaria palibiniana and Psedusotellaria okmotoi. These are distinguished from P. longipedicellata by shorter pedicel and puberulent pedicels, respectively and by being distributed allopatically between P. longipedicellata and rest of species. The complete chloroplast genome of P. longipedicellata was successfully rescued from raw reads generated by HiSeq2000. Its total length is 149,626 bp consisting of four regions: large single copy (LSC) region (81,292 bp), small single copy (SSC) region (16,984bp), and inverted repeats (IRs; 25,765 bp per each). It contained 126 genes (81 coding DNA sequence (CDS), eight rRNAs, and 37 tRNAs); 18 genes (seven CDS, four rRNAs, and seven tRNAs) are duplicated in inverted repeat regions. The overall GC content of P. longipedicellata is 36.5% and in the LSC, SSC, and IR regions were 34.3%, 29.3%, and 42.4%, respectively. Based on phylogenetic analysis of chloroplast genomes of P. longipedicellata and relatives species presents clear phylogenetic positions of Pseudostellaria genus. This chloroplast genome will be an important sequence resources for further researches of Pseudostellaria genus.

Key words: Pseudostellaria, Pseudostellaria longipedicellata, Chloroplast genome, Caryophyllaceae

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