

## DNA Barcoding of Tree Endemic Campanula Species From Artvin, Türkiye

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**Abstract :** DNA barcoding is the method of description of species based on gene diversity. In current studies, registration, genetic identification and protection of especially endemic plants species are carried out by DNA barcoding techniques. Molecular studies are based on the amplification and sequencing of the barcode gene region by the PCR method. Endemic *Campanula choruhensis* Kit Tan & Sorger, *Campanula troegera* Damboldt and *Campanula betulifolia* K.Koch is widespread in Artvin, Erzurum and around Çoruh valley passing through it. Intense road and dam constructions are carried out in and around the distribution area of this species. This situation harms the habitat of the species and puts its extinction. In this study, the plastid matK barcode gene regions (650 bp) of three *Campanula* species were created. To make the identification of this species quickly and accurately, gene sequence compared with sequences of other *Campanula* L. species. As a result of phylogenetic analysis, *C. choruhensis* is close relative to *C. betulifolia*. Morphologically, these species were determined to be more similar to each other with flower and leaf characters. *C. troegera* formed a separate branch.

**Keywords :** campanula, DNA barcoding, endemic, türkiye, artvin

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