The complete chloroplast genome of Leontice incerta and phylogeny of Berberidaceae

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ABSTRACT
Leontice incerta, which belongs to Berberidaceae, is an endangered species in China. In this study, the chloroplast (cp) genome of L. incerta was assembled using genome skimming sequencing and the phylogeny of Berberidaceae was reconstructed based on whole cp genome. The cp genome of L. incerta is 156,923 bp in length, comprising two copies of IR (26,121 bp) regions separated by the LSC (85,622 bp) and SSC (19,059 bp) regions. The cp genome encodes 112 unique genes, consisting of 78 protein-coding genes, 30 tRNA genes, and four rRNA genes, with 19 duplicated genes in the IR regions. Phylogenetic analysis indicates that L. incerta is sister to Gymnospermium microrrhynchum, subsequently is sister to Nandia domestica.

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introns. The phylogeny revealed that *L. incerta* and *G. microrrhynchum* formed a clade with high support, which is sister to *Nandina domestica* (Figure 1).

In conclusion, the complete chloroplast genome of *L. incerta* is reported for the first time in this study. It will provide essential and important genetic resources for future conservation of this endangered species, and also gain insights into evolutionary patterns within the Berberidaceae family.

**Disclosure statement**

No potential conflict of interest was reported by the authors.

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