



*Methodology*

# An efficient approach to identify *Ginkgo biloba* cultivars by using random amplified polymorphic DNA markers with a manual cultivar identification diagram strategy

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**ABSTRACT.** Cultivar identification is a key step to avoid the formation of homonyms and synonyms of *Ginkgo biloba*. In this study, a new approach based on combinational utilization of polymorphic bands produced from 6 different random amplified polymorphic DNA (RAPD) primers was developed for identifying 42 *Ginkgo* cultivars, and a manual cultivar identification diagram that consisted of polymorphic bands produced from different RAPD primers was reported. To check the reliability and efficiency of the cultivar identification diagram, 5 randomly chosen cultivars were further tested, and the workability of the diagram was verified. This new approach will be very helpful for *Ginkgo* cultivar discrimination and protection, and will also be beneficial for the nursery industry for early identification of *Ginkgo* seedlings.

**Key words:** *Ginkgo biloba*; Cultivar identification; RAPD markers