

Determination of the Components in Yu-Ping-Feng San by RAPD Analysis

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摘要.

Abstract

In this study, the RAPD (random amplified polymorphic DNA) technique was employed for the first time to determine the components in a Chinese herbal prescription. Forty decamer oligonucleotide primers were screened in the RAPD analysis to identify three Chinese medicines, the dried root of *Astragalus membranaceus* (Fisch.) Bge., the dried root of *Ledebouriella seseloides* Wolff, and the dried rhizome of *Atractylodes macrocephala* Koidz, in a Chinese prescription. Only primer OPP-10 simultaneously generated three distinct markers were each specific to one component. The marker with 200 bp is specific to *Astragalus membranaceus*; the 440 bp marker is specific to *Atractylodes macrocephala*; and the remaining marker with 500 bp was present in *Ledebouriella seseloides*. The presence of the three herbal medicines in the mixed sample, the Chinese prescription, was determined when the primer OPP-10 RAPD reaction was performed. The technique was proved to contribute to the identification of components in the Chinese medicinal preparations.