

シンギの確認試験法について

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Development of an Identification Test for Hedysari Radix

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Summary

Hedysari Radix (HR) is a crude drug derived from the roots of *Hedysarum polybotrys* (Leguminosae). It is often used in various Kampo formulae as a substitute for Astragali Radix (AR) to avoid the side effects attributed to AR.

In this study, we developed an identification test for HR by TLC in preparation for the listing of HR in the Japanese Pharmacopoeia (JP). First, medicarpin (1) was isolated and examined as a candidate marker compound for the TLC test. However, it proved unsuitable because wide content variation was observed in inter- and intra-HR sample comparisons. Next, 9-O-methylcoumestrol (2) was isolated as a candidate marker compound, and was detected consistently in all cuttings of HR samples.

Therefore, we selected an identification test based on the detection of compound 2 by TLC. The test could clearly distinguish HR from AR, which is a similar crude drug listed in JP.

The established TLC conditions were as follows: chromatographic support, silica gel; developing solvent, hexane/2-butanone/formic acid (60/40/1); developing length, 10 cm; visualization, UV (365 nm); R_f value of compound 2, 0.4.

Key words

Hedysari Radix, identification test, 9-O-methylcoumestrol, TLC