投稿/原著

医薬品医療機器レギュラトリーサイエンス
Pharmaceutical and Medical Device Regulatory Science
Vol. 42, No. 8, 714～722 (2011)

ウヤクの指標成分 laurolitsine の標準物質としての調製とその品質評価

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(受付：平成23年2月15日, 受理：平成23年6月15日)

Preparation and Quality Evaluation of Laurolitsine from Root of *Lindera strychnifolia* Fernandez-Villar (*Lauraceae*) as a Standard Reference Material

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Summary

The origin of LINDERAE RADIX is the root of *Lindera strychnifolia* Fernandez-Villar (*Lauraceae*), as described in the Japanese Pharmacopoeia Fifteenth Edition. Although LINDERAE RADIX is identified by monitoring laurolitsine as a characteristic marker for quality control by means of thin-layer chromatography (TLC), a standard reference material of laurolitsine is not available. Here, we present an isolation method and quality evaluation of laurolitsine from the root of *Lindera strychnifolia* Fernandez-Villar (*Lauraceae*) cultivated in Shingu city.

Ground root bark of LINDERAE RADIX was defatted with hexane, then extracted with ethyl acetate under a basic condition. The extract was purified through a SiO_2 column to afford a crude product, which was recrystallized from 20% HCl to afford laurolitsine hydrochloride as platelet crystals. The impurities in this compound amounted to less than 1% by HPLC measurement, and residual organic solvents amounted to less than 0.02%. Stability tests showed that the compound could be stored at room temperature in the presence of silica gel with protection from light.

The TLC identification test of LINDERAE RADIX is significantly improved by the use of authentic laurolitsine hydrochloride as a standard reference material. Further investigation, including quantitative analysis, is in progress.

Key words

LINDERAE RADIX, Quality evaluation, Laurolitsine, Japanese Pharmacopoeia, Standard reference material, TLC