

トウシンソウの確認試験法について

竹田 文信^{*1}, 若菜 大悟^{*1}, 横倉 胤夫^{*2}, 神谷 洋^{*2}, 浅間 宏志^{*2}, 近藤 誠三^{*2},
和田 篤敬^{*2}, 浮田 謙二^{*2}, 若林 健一^{*2}, 高橋 喜久美^{*2}, 富塚 弘之^{*2},
佐々木 博^{*2}, 菊地 祐一^{*3}, 山本 豊^{*4}, 嶋田 康男^{*4}, 合田 幸広^{*1, #}

(受付:平成24年6月29日, 受理:平成24年10月16日)

Studies on the Identification Test for JUNCII HERBA

Ayanobu TAKEDA^{*1}, Daigo WAKANA^{*1}, Tsuguo YOKOKURA^{*2}, Hiroshi KAMIYA^{*2},
Hiroshi ASAMA^{*2}, Seizo KONDO^{*2}, Atsunori WADA^{*2}, Kenji UKITA^{*2}, Ken-ichi WAKABAYASHI^{*2},
Kikumi TAKAHASHI^{*2}, Hiroyuki TOMITSUKA^{*2}, Hiroshi SASAKI^{*2}, Yuichi KIKUCHI^{*3},
Yutaka YAMAMOTO^{*4}, Yasuo SHIMADA^{*4}, Yukihiro GODA^{*1, #}

Summary

JUNCII HERBA is the crude drug derived from the aerial part or the pith of *Juncus effusus* (Juncaceae). The drug is mainly used for the treatment of various eye disorders as a component of Kampo formulae, such as Jijinmeimokuto (滋腎明目湯).

The formula, Jijinmeimokuto, has been added to the standards of approval for OTC Kampo formulations as of April, 2011, but its component, JUNCII HERBA, has no disclosed official standard yet, even though it is used under a letter of approval. Therefore, we investigated the identification test of the drug in preparation for listing of the drug in The Japanese Standards for non-Pharmacopoeial Crude Drugs 2012 (non-JPS 2012). We have developed a test based on the detection of luteolin and its 3',5'-dimethylether derivative (1) by TLC. The test clearly distinguished the drug from EQUISETI or EPHEDRAE HERBA, both of which have similar appearance to JUNCII HERBA.

The established TLC conditions were as follows: chromatographic support, silica gel; developing solvent, EtOAc/2-butanone/water/formic acid (25/3/1/1); developing length, 7 cm; visualization, UV (365 nm) and ferric chloride-methanol reagent; R_f values, 0.75 for luteolin and 0.4 for luteolin 3',5'-dimethylether (1).

Key words

JUNCII HERBA, Identification test, Luteolin, Luteolin 3',5'-dimethylether, Non-JPS 2012, TLC