

Studies on the component analysis and quality control in tonic wine preparation of King-Mon-Long-Fong-Jyo

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The origin of King-Mon-Long-Fong-Jyo crude drugs were identified by microscopic and TLC examination, and an HPLC method for simultaneous determination of seven marker substances was established for the quality control in tonic wine preparation of “King-Mon-Long-Fong-Jyo”. These marker substances were gomisins A and schizandrin from *Schizandrae* Fructus, loganin from *Corni* Fructus, cinnamic acid and cinnamaldehyde from *Cinnamomi* Cortex, and scopoletin and ferulic acid from *Angelicae* Radix. Different rice wine extraction volume and extraction temperature conditions were performed to evaluate quality of King-Mon-Long-Fong-Jyo.

Extracted samples were run through the HPLC column (Inertsil 5 ODS-2, 4.6 I.D. × 250mm.) at 30°C and the column was developed with a mixture of 20% acetonitrile and 70% acetonitrile (adjusted to pH3.0 with phosphoric acid) aqueous solution and then employed linear gradient elution method at a flow-rate of 1.0 mL/min. An UV 250 nm was used for the detection of the marker substances.

Relative standard deviations of intra- and inter-day analysis were less than 5%. This separation method could be successfully applied for the simultaneous determination of seven marker substances in “King-Mon-Long-Fong-Jyo”.

Keywords : King-Mon-Long-Fong-Jyo, gomisins A, schizandrin, loganin, cinnamic acid, cinnamaldehyde, scopoletin, ferulic acid.