ABSTRACT

VALIDATION OF THIN LAYER CHROMATOGRAPHY-
DENSITOMETRY FOR DETERMINATION OF COLCHICINE IN
Gloriosa superba Linn. INFUS

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Validation of thin layer chromatography-densitometry for
determination of colchicine in Gloriosa superba Linn. infus has been done. The purpose of this study was to obtain a valid thin layer chromatography
densitometry for determination colchicine in Gloriosa superba Linn. infus
using selectivity/ specificity, accuracy, precision and linearity parameter.

The results were as follows, selective mobile phase obtained was
chloroform:diethylamine (9:1). Linearity test showed that there were linear
relationship between colchicine concentration and area with coefficient
correlation (r = 0,9965) and Vxo = 8,19%. The average recovery was 85,77
± 6,39 %, (RSD = 7,45%). RSD for instrument precision was 3,74%.

The results of this study indicate that this method was valid and
fulfill requirement of AOAC, with selectivity for colchicine (Rs = 2, 14 and
3, 5), linearity (r=0,9965), accuracy (85,77% ± 6,39%) and precision
(7,45%) for analytes with concentration 1 ppm.

Keyword: Colchicine, thin layer chromatography-densitometry, Gloriosa
superba Linn.