

ADULTERANTS IN AYURVEDA MEDICINE : PHARMACOGNOSY OF  
TRICHOSANTHES CUCUMERINA AND ITS  
ADULTERANT, TRICHOSANTHES ANGUINA

K.T.D. de Silva, K.A.P. Jayatilaka

Dept. of Chemistry, University of Sri Jayewardenepura.

Trichosanthes cucumerina (Leguminosae) is used with other drugs for indigestion, jaundice, fever, skin eruptions, pneumonia in Ayurveda Medicine.

Trichosanthes cucumerina (Dumella) is sometimes adulterated with Trichosanthes anguina (Leguminosae) - pathola - as both look alike in the dried form.

The microscopic and macroscopic characteristics were studied and these can be used to distinguish the authentic plant from its adulterants in the fresh form.

The microscopic characters of the dried powders of these two plants were also studied. This enables one to distinguish or authenticate these drugs when they are in the dried form and when they are incorporated into compound medical preparations.

TLC studies were done in order to determine any similarity in the chemical constituents of the adulterant with those of the authentic plant. Pet ether, CH<sub>2</sub>Cl<sub>2</sub>, EtOAc and MeOH extracts of these two plants were used for TLC studies and TLC profiles for identification have been established.

The volatile compounds in both plants were compared using Thermomicro - separation; Transfer and Application method according to Stahl (TAS). Suitable chromatographic conditions were developed. Profiles which could be used to distinguish between the two plants will be presented.

The volatiles of these two plants were also analysed by gas chromatography.

These studies therefore enable one to distinguish the authentic plant from its adulterant; thus the quality of an Ayurvedic preparation could be established.

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