

VOLATILE AROMA CONSTITUENTS OF
CENTELLA ASIATICA (HEEN GOTUKOLA)

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Centella asiatica is a perennial herb of the family Umbelliferae. This herb is used in Ayurvedic medicinal preparations and is also eaten as a vegetable. Recently *C. asiatica* has become an economically important herb in Sri Lanka since it has proved possible to process this herb to herbal tea products with a good potential and popularity in the export market.

In order to develop a method of quality control for the herbal tea products, aroma volatiles of *C. asiatica* were studied. The volatile oil (present in less than 0.1%) of the entire herb was obtained by established procedures and was analysed by gas chromatography - mass spectroscopy. The volatiles contained 19 main components of which 14 (comprising over 68% of the sample) have been positively identified. Some of the main constituents are α -pinene, β -pinene, α -copaene, β -caryophyllene, trans- β -farnesene and α -humulene.

The volatiles of a related variety of this herb locally known as 'Maha Gotukola' (botanically classified as *Hydrocotyl javanica*) yielded a similar GC pattern but with a higher percentage of monoterpenes than in *C. asiatica*. Both varieties, however, differed from the *C. asiatica* of Japanese origin (Asakawa et al)

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Reference

Asakawa, Y., Matsuda, R. and Takenot, T. (1982) Phytochemistry, 21, 2590