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Study on weed flora and their influence on patchouli (*Pogostemon cablin* Benth.) oil and patchoulol (2007) *Journal of Plant Sciences*, 2 (1), pp. 96-101. Cited 1 time.

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Abstract

Experiments were conducted to study the weed flora and its influence on the yield of oil and Patchoulol by co-distillation of fresh Patchouli leaves with weed biomass at different proportions (0, 5, 10, 15 and 30%) during 2004-05 and 2005-06. The survey of weeds commonly growing in patchouli plantation was made and a total of 17 weed species were recorded. *Alternanthera sessile*, *Cynodon dactylon* and *Oxalis corniculata* exhibited 100% frequency in both the years. *A. sessile*, *C. dactylon* and *O. corniculata* had highest density during 1st year and the density of most of the weed species increased during 2nd year except *C. dactylon* and *A. sessile*. Co-distillation of fresh Patchouli leaves with weeds at the rate of 0, 5, 10, 15 and 30% yielded 0.70, 0.67, 0.65, 0.50 and 0.43% oil, respectively. It was observed that the oil yield decreased gradually with the increase in weed biomass. However, the percentage of patchoulol showed a different behaviour. It decreased at 15% (53.7) and 30% (50.4) and increased at 5% (56.5) and 10% (63.8) treatments. The oil extracted with weed biomass imports a weedy odour, which may decrease its commercial value. © Academic Journals Inc.

Author Keywords

Co-distillation; Oil yield; Patchouli; Patchoulol; Weed; Weedy odour

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