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SELECTION OF ODOR FROM AROMATIC FLOWERS FOR RELAXING EMOTION

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Abstract:

Floral aroma originates from the biosynthesis of aromatic plants. Each kind of plant has unique fragrance with different properties and components. It is thus important to select aromatic plants and methods of aroma extraction from each plant to be utilized as aromatic substance sources. The current research was aimed to determine appropriate methods to extract aroma from aromatic plants and to select certain aromas with relaxing effect. Psychophysiological tests were performed with 3 parameters: sensory evaluation, examination of cortisol hormone level as a biological index and determination of linalool by high-performance liquid chromatographic method as a chemical index identifying sense of relaxation. The aromas from 12 floral subjects, namely cork tree (*Millingtonia hortensis*), bread flower (*Vallis glabra*), fragrant dracaena (*Dracaena fragrans*), crinum lily (*Crinum asiaticum*), pagoda tree (*Plumeria acuminata*), Siamese white ixora (*Ixora ebarbata*), orange jasmine (*Murraya paniculata*), Siamese boxwood (*Gardenia collinsiae*), Rangoon creeper (*Quisqualis indica*), asoke tree (*Saraca indica*), bullet wood (*Mimusops elengi*), and water jasmine (*Wrightia religiosa*) were extracted by various methods of water distillation, steam

Steam distillation is suitable for *V. glabra*, *C. asiaticum* and *W. religiosa*. Water distillation is suitable for *M. hortensis*, *M. paniculata*, *P. acuminata* and *M. elengi*. Solvent extraction is applicable to *I. ebarbata*, *D. fragrans*, *S. indica*, *G. collinsiae* and *Q. indica*. Immersion in

towards different aromas of 30 volunteers, sense of relaxation were reported for the aromas of *V. glabra*, *D. fragrans* and *P. acuminata*, with their scores for relaxation statistically significantly different from those of other flowers, $P < 0.05$. The essences from these four kinds

means of examining the cortisol hormone level and determining the linalool. The analysis demonstrated the reduced level of cortisol hormone and observed linalool as a compound in the 3 floral aroma extracts.

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