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**Characteristic Aroma Components of Tosa-buntan (*Citrus grandis* Osbeck forma *Tosa*) Fruit**
[Masayoshi SAWAMURA<sup>1\)</sup>](#), [Hee-Sun SONG<sup>1\)</sup>](#), [Hyang-Sook CHOI<sup>1\)</sup>](#), [Kazushi SAGAWA<sup>1\)</sup>](#) and [Hiroyuki UKEDA<sup>1\)</sup>](#)
*1) Department of Bioresources Science, Faculty of Agriculture, Kochi University*

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The volatile components of Tosa-buntan (*Citrus grandis* Osbeck forma *Tosa*) cold-pressed peel oil were studied by GC and GC-MS. The characteristic aroma compounds were investigated by GC-olfactometry in which a semi-bore capillary column, DB-Wax, was used for effective separation of the volatile components of the oil. Hydrocarbons including mono and sesquiterpenes of the oil accounted for about 98% of the volatile components. The characteristic flavor was also present in the oxygenated fraction. Flavor dilution (FD) factors of the volatile flavor components of the cold-pressed oil were determined by aroma extraction dilution analysis. The relative flavor activity derived from FD-factor and peak area percent was used in this experiment. It was suggested that compounds with higher relative flavor activity such as decanoic acid, heptyl acetate, a-bisabolol, nonanal, *cis*, *trans*-farnesol, *trans*-nerolidol and 2-dodecenal would contribute to Tosa-buntan flavor. Careful sniff testing revealed 2-dodecenal to be a characteristic or key compound of Tosa-buntan aroma. A solution of this authentic compound below 2 ppm gave a pleasant and refreshing aroma similar to Tosa-buntan flavor.

**Keywords:** [Citrus](#), [Tosa-buntan](#), [Citrus grandis](#) Osbeck forma *Tosa*, [aromagram](#), [GC-olfactometry](#), [characteristic aroma components](#), [2-dodecenal](#)

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