

Comparison of bioactive compounds and sensory evaluation on edible flowers tea infusion

ABSTRACT

France Rose Buds, Jasmine Flower, and Osmanthus Flower are three edible flowers commonly available in Malaysia market. Composition of these 3 edible flowers is not widely studied. Hence, the caffeine, total phenolic content (TPC), volatile compounds, and overall acceptability of tea infusion from France Rose Buds, Jasmine Flower, and Osmanthus Flower were compared. Tea infusion from the edible flowers was prepared by boiling it with distilled water. None solvent extraction was carried out to determine the bioactive compounds. Tea infusion of Osmanthus Flower contains the highest caffeine (4.96 ± 1.94 $\mu\text{g/ml}$), total phenolic content (4.33 ± 0.03 mg GAE/g) and overall acceptability (6.16 ± 2.05) compared to France Rose Buds and Jasmine Flower. The Jasmine Flower was found to have the highest number of volatile compounds (13) compared to France Rose Buds and Osmanthus Flower. This study indicates that the edible flowers have the potential for application as food ingredient.

Keyword: France rose buds; Jasmine flower; Osmanthus flower; Caffeine; volatile compounds; Sensory evaluation