

Composition and Monthly Changes of the Volatile Constituents in the Sour Hetsuka-daidai Citrus Peel

ABSTRACT

Sour citrus are prized for their flavor and fragrance. This work identified the components of the peel oil of Hetsuka-daidai (*Citrus sp. hetsukadaidai*), a special sour citrus that is native to the southern part of the Osumi peninsula, Kagoshima, Japan. These compounds were compared to those identified from the peels of six other major sour citrus: lime (*Citrus latifolia*), lemon (*Citrus limon*), Yuzu (*Citrus junos*), Kabusu (*Citrus aurantium*), Kabosu (*Citrus sphaerocarpa*), and Sudachi (*Citrus sudachi*). Peel oil contents were analyzed for the duration of four months during harvest season to investigate the differences in peel oil/fragrance during ripening. These results could facilitate the development of preferred flavor and scent profiles using local species.