

P-116**Chemical Constituents of the Essential Oils of *Prunus Arborea* Var *Densa***

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The volatile components of the leaf, twig and the stem bark of *Prunus arborea* var *densa* were investigated using a combination of GC, GCMS and HS-SPME/GCMS. The emitted volatile fractions from the different parts were analysed using HS-SPME/GCMS while the essential oils were obtained by hydrodistillation method. The main components found in the leaf oils were *E*, *E*- α -farnesene (23.9%), benzaldehyde (23.7%) and *Z*-hexenyl benzoate (11.2%). The twig oil was made up of benzaldehyde (15.4%), benzyl benzoate (12.9%) and benzyl salicylate (6.5%). The stem bark was mainly made up of benzoic acid (17.2%) with small amounts of benzaldehyde (1.6%). However, rapid chemical analyses of the plant parts using HS-SPME/GCMS showed presence of higher amounts of benzaldehyde (>80%) in the stem bark and twig parts when compared to the leaf parts. Overall, it was shown *P. arborea* var *densa* could be a new natural source of benzaldehyde and other phenylpropanoids for uses as flavor, perfumery and herbal ingredients.

Keywords: Rosaceae, *Prunus arborea* var *densa*, essential oil, benzaldehyde.
