

***Melaleuca alternifolia:***

It is a member of the Myrtaceae family in company with Callistemons (Bottlebrushes), Eucalypts and Leptospermums. There are about 220 *Melaleuca* species with 215 native to Australia and the others scattered through New Guinea, Indonesia and South-east Asia.

*Melaleuca alternifolia* (used by Gelair) is an eastern Australian species and occurs in the north coast and adjacent ranges of New South Wales, Australia. It develops into a tall shrub with papery bark and white flowers. The common name, Snow-in-Summer, refers to the white fluffy flowers that develop in the spring and summer months. *Melaleuca alternifolia* develops into a tall upright shrub and a wide range of native insects visit the flowers.

*Melaleuca alternifolia* has aromatic foliage and the valuable "tea tree oil" is extracted from the leaves by steam distillation and refining. Tea tree oil has great germicidal properties and is used in a range of products - antiseptics, deodorants, shampoos (for dogs and humans) and soaps being just some of the products incorporating tea tree oil. Large commercial *Melaleuca alternifolia* plantations have been established on the north coast of New South Wales.

Three main chemical varieties (chemotypes) of *M. alternifolia*, rich in either 1,8-cineole, terpinolene or terpinen-4-ol, are recognised. The terpinene-4-ol rich chemotype of low 1,8-cineole content (<5%) has the most antimicrobial components of tea tree oil and is the source of Gelair tea tree oil.