Comparison of the essential oils of leaves and stem bark from two different populations of Drimys winteri a Chilean herbal medicine

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The chemical composition of the essential oils obtained by hydrodistillation of stem bark and leaves of Drimys winteri J.R. et G. Foster var. chilensis /DC A. Gray (Winteraceae) from Chiloe Island (ID) and Continental Chile (Santiago) (CD) were studied by GC and GC/MS. Sesquiterpene hydrocarbons constituted the main chemical groups in the stem bark oils, with ?-santalene, trans-?-bergamotene and curcumenes as the major components. Monoterpenes constituted the main chemical groups in the leaves of Island plants with ?-pinene (23.1%) ?-pinene (43.6%) and linalool (10.5%) as the main components whereas sesquiterpenes (germacrene D 17.6%) and phenylpropanoids (safrole 20.8%) are the most abundant in the leaves of Continental plants.