



Chemical composition of the essential oil of *Schinus weinmannifolius* and *Schinus polygamus* collected in Rio Grande do Sul.

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The genus *Schinus* belongs to the family Anacardiaceae and comprises about 600 species found in several typical plants of tropical and subtropical regions (1), with a prevalence of about 27 species in South America (2). The plants belonging to this genus are commonly known as mastic (3) and can be identified by the production of essential oils, among other constituents (4). One of the most abundant characteristics, mainly present in its fruits, is the strong and concentrated smell (5). Therefore, this study aimed the chemical characterization of the volatile oil from leaves and fruits of *S. weinmannifolius* and leaves of *S. polygamus*, native of Rio Grande do Sul. The aerial parts of both species were collected in Lombas, Santo Antônio da Patrulha. A voucher specimen was deposited in the Herbarium of the Universidade Federal do Rio Grande do Sul (ICN). The oil from the leaves and fruit of the species was obtained by hydrodistillation, using the Clevenger-type apparatus for 4 h. The chemical analysis was carried out by gas chromatography coupled to mass spectrometry (GC/MS). The identification of compounds was based on comparison of both retention indices and mass spectra with authentic samples and data from literature (6). The yield of volatile oil from leaves and fruits of *S. weinmannifolius* was 0.5 % and 2.0 %, respectively, and from leaves of *S. polygamus* was 0.4 %. The major compounds identified in the leaves of *S. weinmannifolius* were the sesquiterpenes α -cadinol (21.2 %), spathulenol (11.0 %) and cubenol (9.8 %). For the fruits of this species, the major compounds were the sesquiterpenes α -cadinol (20.5 %) and spathulenol (9.9 %) and the monoterpene limonene (9.8 %). For the leaves of *S. polygamus*, nonane (33.5%) was observed, an aliphatic compound and α -cadinol (15.4 %), as the main compounds. These results demonstrate that the cadinane cyclization pathway is one of the biosynthetic pathways that are present, especially by the α -cadinol, a common compound for both species.

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