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Chabaco Armijos,\* Eduardo Valarezo, Luis Cartuche, Tomás Zaragoza, Paola Vita Finzi, Giorgio Giacomo Mellerio, and Giovanni Vidari

**C. Armijos\*, E. Valarezo, L. Cartuche**

Universidad Técnica Particular de Loja, Departamento de Química y Ciencias Exactas, San Cayetano Alto, s/n. AP: 11 01 608, Loja, Ecuador.

**T. Zaragoza**

Departamento de misiones universitarias, Pontificia Universidad Católica del Ecuador, Sede Ibarra (PUCE-SI), Av. Jorge Guzmán Rueda y Av. Aurelio Espinosa Pólit. Ciudadela “La Victoria, Ibarra – Provincia de Imbabura – Ecuador

**P. Vita-Finzi, G. G. Mellerio, G. Vidari\***

Dipartimento di Chimica and Centro CEMEC, Università degli Studi di Pavia, Viale Taramelli 12, 27100, Pavia, Italy.

*\*Corresponding author*

C.A. Phone: +59373701444; Fax: +59373701444; e-mail: cparmijos@utpl.edu.ec

**Abstract**

*Ethnobotanical and ethnomedicinal relevance:* The importance given in Ecuador to the rescue of traditional knowledge and nutritional value of ancestral foods and drinks, has stimulated our investigation of the chemical composition and some biological activities of *M. fragrans* (‘arrayán’) essential oil, a natural aromatic additive used in the preparation of the traditional fruit-juice ‘colada morada’, which is typically drunk in the Day of the Dead or All Soul’s Day. *Material and methods:* Different essential oils of *Myrcianthes fragrans* (Sw.) McVaught were obtained by hydrodistillation of the aerial parts of the plant collected in Cerro Villonaco (Loja-Ecuador) at three different phenological growth stages, i.e., during foliation (Fo), flowering (Fl) and fruiting (Fr) stages. The chemical compositions of the essential oils were determined by GC-MS and GC-FID techniques. The antimicrobial activities were determined by the broth microdilution method and reported as minimal inhibitory concentration (MIC, ug/mL).

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