

Quantification of Major Flavonoids in Carnation Tissues (*Dianthus caryophyllus*) as a Tool for Cultivar Discrimination

Francesco Galeotti^a, Elisa Barile^b, Virginia Lanzotti^b, Marcello Dolci^c,
and Paolo Curir^{a,*}

^a CRA-Istituto Sperimentale per la Floricoltura, Corso Inglesi 508, 18038 Sanremo (Imperia), Italy. E-mail: p.curir@istflori.it

^b Dipartimento di Scienze e Tecnologie Agroalimentari, Ambientali e Microbiologiche, Università del Molise, Via F. De Sanctis, 86100 Campobasso, Italy

^c Dipartimento di Valorizzazione e Protezione delle Risorse Agroforestali, Università di Torino, Via L. da Vinci 44, 10095 Grugliasco (Torino), Italy

* Author for correspondence and reprint requests

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One flavone-*C*-glycoside and two flavonol-*O*-glycosides were recognized and isolated as the main flavonoidal components in nine different carnation cultivars, and their chemical structures have been determined by spectroscopic methods, including UV detection, MS and NMR. The distribution of these three compounds in flowers, leaves, stems, young sprouts, and roots of each cultivar was evaluated by a simple HPLC-UV method: the graphic representation of their content in the different tissues allows to identify and characterize unambiguously each considered carnation cultivar. The presented method could be an easy, inexpensive and reliable tool for carnation cultivar discrimination.

Key words: Flavonoids, Carnation, Cultivar Discrimination