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ABSTRACTS

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Characterization of seven medicinal species by the phenolic constituents of their hydrolyzed extracts

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As a part of a project intitled "Technologies for the valorisation of medicinal plants from Entre Douro e Minho region" which has one of its aims the cultivation of species of high and constant quality, we are developing technologies for quality control applied to the species involved.

As a first approach, and in order to know what kind of compounds were present, the methanolic extracts were subjected to alkaline and acid hydrolysis prior to HPLC analysis. The chromatographic separation was achieved using a RP 18 column and a gradient of water-formic acid (19:1) and methanol. A diode-array detector was used to monitor the effluent at 280, 320 and 350 nm.

On using this methodology 19 phenolic compounds (flavonoids, phenolic acids and coumarins) were separated and identified. Their distribution by the species analysed was as follows: *Centaurea erythraea*: vanilic acid, *p*-coumaric acid, ferulic acid, sinapic acid, 3,4,5-trimethoxycinnamic acid, 4-methoxycinnamic acid and kaempferol; *Cynara cardunculus*: 4-methoxycinnamic acid, luteolin and apigenin; *Hypericum androsaemum*: 2,4-dihydroxybenzoic acid, caffeic acid, quercetin and kaempferol; *Lavandula officinalis*: caffeic acid, ferulic acid, coumarin, hemiarin, luteolin and apigenin; *Lippia citriodora*: luteolin, apigenin and diosmetin; *Mentha piperita*: *o*-coumaric acid, eriodictyol, hesperetin, luteolin, apigenin and diosmetin; *Salvia officinalis*: syringic acid, *p*-coumaric acid, ferulic acid, sinapic acid, luteolin and apigenin.

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