



Anthocyanins Content and Chemical Composition of the Essential Oil of Three Blackberry Cultivars from Southern Brazil

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SUMMARY. In this work, fruits of three cultivars, Caingangue, Cherokee and Guarani, originated from collections from Embrapa, Pelotas, Rio Grande do Sul, were analyzed concerning the anthocyanin content and the essential oils composition. The anthocyanin content were determined by spectrophotometry, resulting in 0.606 ± 0.018 g/ 100 g, 0.728 ± 0.020 g/100 g and 0.854 ± 0.065 g/ 100 g expressed as cyanidin-3-glucoside, for the three cultivars, respectively. The essential oils were obtained by hydrodistillation in a Clevenger apparatus and the chemical characterization was performed by GC-FID and GCMS. The oil composition of Caingangue cultivar presented predominance of monoterpenes, especially piperitone (50.5%) and camphor (15.5%). The oil fractions of Cherokee and Guarani cvs. were characterized by sesquiterpenes. Cherokee fruits presented high amount of β -caryophyllene (29.6%) followed by the hexadecanoic acid (11.7%), whereas in Guarani fruits spathulenol (22.4%), globulol (16.9%), *epi*-globulol (11.3%), δ -cadinene (10.0%) and α -cadinene (10.0%) were the main constituents.

KEY WORDS: Anthocyanins, Blackberry, Essential Oil, Rosaceae, *Rubus* sp.

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