

Alimentos - A7**Determination of the flavonoid components of cashew apple
(Anacardium occidentale) by LC-DAD-ESI/MS** OK**Edy Sousa de Brito¹, Manuela Cristina Pessanha de Araújo²,****Long-Ze Lin³, James Harnly³*****edy@cnpat.embrapa.br*****¹ Embrapa Tropical Agroindustry, R Dra Sara Mesquita, 2270, Fortaleza, CE 60511-110, Brazil****² Embrapa Food Technology, Av. das Américas, 29501, Rio de Janeiro, RJ 23020-470, Brazil****³ Food Composition Laboratory, Beltsville Human Nutrition Research Center, Agricultural Research Service, USDA, 103000 Baltimore Avenue, Beltsville, MD 20705, United States.**

Liquid chromatography, with diode array detection and electrospray ionization mass spectrometry (LC-DAD-ESI/MS), was used to identify and quantify flavonoids in cashew apple. One anthocyanin and thirteen glycosylated flavonols were detected in a methanol-water extract. Among them, the 3-O-galactoside, 3-O-glucoside, 3-O-rhamnoside, 3-O-xylopyranoside, 3-O-arabinopyranoside and 3-O-arabinofuranoside of quercetin and myricetin, as well as kaempferol 3-O-glucoside were identified by direct comparison with standards or positively identified flavonoids in cranberry. The anthocyanin was the 3-O-hexoside of methyl-cyanidin. Trace amounts of delphinidin and rhamnetin were detected in the hydrolyzed extract, suggesting their glycosides were present, but undetectable, in the original extract. The concentrations of the 14 flavonoids in the tested sample were determined. This is the first report of these flavonoids in cashew apple.