

Our investigation of phenolic constituents of fruits, flower buds, and leaves of *Feijoa sellowiana* led to the isolation of twenty-one phenolics including three new gossypetin glycosides **1–3**, and also the purification of a proanthocyanidin fraction. A high-performance liquid chromatography method for simultaneous analysis of phenolic constituents was established and then used to investigate the phenolic profiles of the parts of the plant species, to show the presence of characteristic flavonoids and ellagic acid derivatives or ellagitannins in the extracts from fruits, flower buds, and leaves. The branch extract profile also suggested the presence of alkylated ellagic acids as characteristic constituents. Inhibitory effects of feijoa flavonoids on mushroom tyrosinase were seen, although in some cases this may have resulted from direct interaction with the enzyme. Cytotoxic effect of the proanthocyanidin fraction was also shown.

New flavonoids were found in various parts of *Feijoa sellowiana*.