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ANTIPLASMODIAL *C*-AND *O*-GLYCOSYL FLAVONES AND OTHER COMPOUNDS FROM THE LEAVES AND BRANCHES OF *SIMABA PUBICARPA* DEVECCHI, W. W. THOMAS & FRANCESCH. (SIMAROUBACEAE)

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The aim of this work was to investigate the chemical composition and antiplasmodial activity of the Amazon forest tree *Simaba pubicarpa*. Branch wood and branch bark hexane and EtOAc extracts were prepared by sequential maceration. Sequential normal-phase column chromatography (CC) on the hexane branch wood extract yielded the triterpenes niloticin (**1**) and piscidinol A (**2**). Aqueous acid extraction of the $CHCl_3$ soluble fraction of the MeOH branch wood extract followed by basification of the acidic extracts, extraction with $CHCl_3$ and semipreparative HPLC yielded 9-methoxycanthin-6-one (**3**). *p*-Salicylic (**4**) and vanillic (**5**) acids were obtained after reverse phase CC, then normal phase CC performed on the branch bark EtOAc extract. Pulverized leaves were macerated in hexanes, then MeOH/H_2O. After partial evaporation, the resulting MeOH/H_2O extract was partitioned with hexanes, then EtOAc. Sequential reverse-phase CC on the EtOAc fraction, followed by semipreparative HPLC provided methyl gallate (**6**) and the flavonoids epicatechin (**7**), afzelin (**8**) and quercitrin (**9**). The leaf MeOH/H_2O extract was suspended in 1% HCO_2H in MeOH, then filtered. The filtrate was evaporated and underwent serial reverse-phase CC, then semi-preparative HPLC, yielding isovitexin (**10**) and vitexin (**11**). Compounds **4** and **7–11** are reported for the first time in the genus *Simaba*. Extracts and compounds **6–11** were evaluated *in vitro* against the human malaria parasite *Plasmodium falciparum* K1 strain. Extracts of all parts and afzelin were active and compounds **6**, **9–11** were moderately active, demonstrating the antiplasmodial potential of *S. pubicarpa* extracts and chemical constituents.

Keywords: *Afzelin; isovitexin; vitexin; Plasmodium falciparum; Amazon rainforest.*