Constituents of Antibacterial Extract of Caesalpinia paraguariensis Burk.

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The Argentinean legume *Caesalpinia paraguariensis* Burk. (Fabaceae) was selected for further fractionation work based on the strong antimicrobial activity of its CH₂Cl₂-MeOH (1:1 v/v) extract against a host of clinically significant microorganisms, including antibiotic resistant strains. 1D and 2D NMR enabled the identification of the novel benzoxecin derivative caesalpinol along with the known compounds bilobetin, stigma-5-en-3-O-β-6'-stearoylglucopyranoside, stigma-5-en-3-β-glucopyranoside, oleanolic acid, 3-O-(E)-hydroxycinnamoyl oleanolic acid, betulinic acid, 3-O-(E)-hydroxycinnamoyl betulinic acid, and lupeol from the active fractions. Oleanolic acid was found active against *Bacillus subtilis* and both methicillin-sensitive and -resistant *Staphylococcus aureus* with MICs of 8 (17.5 μM), 8 and 64 (140 μM) μg/ml, respectively. The rest of the compounds, however, did not show activity.

Key words: Caesalpinia paraguariensis, Structure Elucidation, Antibacterial Activity