Antimicrobial activity of crude extract of bark and branch of *Cenostigma cf. macrophyllum* (Caesalpinioideae) against *Streptococcus* of mutans group.

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Introduction: The *Cenostigma cf. macrophyllum*, known as Canela de Velho, is used for treatment of several pathologic conditions at brazilian Semiarid. This study evaluated the antimicrobial activity of ethanolic extracts (EE) of bark and branch of this plant against *Streptococcus* of mutans group.

Experimental Part: The bark and branch of *C. cf. macrophyllum* were collected at National Forest Contendas do Sincorá and was evaluated their antimicrobial activity of EE of both by determination of minimal inhibitory concentration (MIC) and minimal bactericide concentration (CBM). It were examined the strains *Streptococcus mutans* UA159, *S. mutans* Ingbrtt 1600 e *S. sobrinus* 6715. The EE was tested at concentrations ranging of 1000 to 31, 25 µg/mL. The plates was incubated at 37°C by 24h. Then, it was observed visually, if there was bacterial growth and confirmed with the resazurin dye. As positive control was used medium, inoculum and ethanol (10% v/v). It were realized 3 triplicates of this experiment (n=9).

Results/Discussion: The EE of bark showed antimicrobial activity against *S. mutans* Ingbrtt 1600 with MIC 62,5 µg/mL and MBC 125 µg/mL, and the branch presented values of MIC of 500 µg/mL and of MBC of 1000 µg/mL. For *S. mutans* UA159 the EE of bark demonstrated MIC 125 µg/mL and MBC 250 µg/mL, and the branch MIC 62,5 µg/mL and MBC 125 µg/mL. As well for the strains *S. sobrinus* 6715, the EE of bark presented MIC of 500 µg/mL and MBC of 1000 µg/mL and the branch, MIC of 250 µg/mL and MBC >1000 µg/mL.

Conclusion: The EE of bark and branch of *C. cf. macrophyllum* possesses antimicrobial property against resident bacteria of oral cavity and, so, it is important to continue the study in search for elucidation of your action mechanism and identification of the bioactives compounds from this extracts.

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