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Influence of extractive parameters on preparation of a solution from *Arrabidaea chica* Verl. (Bignoniaceae)

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Introduction: Leaves of *Arrabidaea chica* Verl. (Bignoniaceae), popularly known as cajuru or pariri, are widely used in the traditional medicine for treating infectious diseases and as cicatrizing and anti-inflammatory agents. Some pharmacological experiments confirm their therapeutic efficacy and indicate the phenolic compounds as possibly responsible for their activities.

Objectives: The aim of this work was to evaluate the influence of extractive parameters on tannin content and dry residue in solutions obtained from leaves of *Arrabidaea chica*.

Methods: Leaves of *Arrabidaea chica* were dried for seven days in a circulating air oven at $40 \pm 5^\circ\text{C}$. After drying, the leaves were knifed by a knife mill (1mm mesh). The raw material was characterized by granulometric analysis and loss of drying following pharmacopeia methods. The extractive solutions were elaborated using distilled water as solvent. The influence of extractive methods (infusion and decoction); drug proportion w/v (2.5% and 7.0%) and extraction time (5 and 15 minutes) on the tannin content and the dry residue was evaluated following a factorial design 2^3 . Tannin content was assayed by spectrophotometry following the Folin-Denis method, $\lambda = 750\text{nm}$, using casein as precipitant agent and dry residue was determined by gravimetric method.

Results: The raw material presented particle mean diameter of $558\mu\text{m}$ and loss of drying of 10.4%. The extractive solutions presented dry residue ranging from 0.32 to 0.96g% and tannin content ranging from 1.19 to 6.23g%. Although the statistical analysis (ANOVA) demonstrated that on both studied dependent variables the drug proportion was the most significant factor, such factor presented a positive effect on the dry residue and a negative effect on the tannin content. In addition, there was no correlation between the dry residue and the tannin content.

Conclusion: Considering the studied parameters, independent of the extractive method, the ideal condition for achieving a solution of *Arrabidaea chica* with high tannin content is different from the ideal condition for obtaining a high dry residue solution.

Arrabidaea chica Verl. (Bignoniaceae)

Palavras-Chave: *Arrabidaea chica* Verl. (Bignoniaceae)