Content of total polyphenols in the leaves of *Ruta graveolens* L

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Introduction: The phenolic compounds are constituents of several classes of naturally occurring antioxidants substances, it can inhibit or retard oxidation of lipids or the molecules, preventing the initiation or propagation of oxidation chain reaction (Sousa, Quim. Nova, v.30, p.351, 2007). For the rue species (*Ruta graveolens* L.) there are reports about the toxic activities on the uterus and as a skin sensitizer (Haida, RBCS, v.9, p.11, 2011). This study aimed to quantify the amount phenolic compounds rue leaves.

Experimental part: The rue leaves were collecte in the Horto Medicinal of UNIPAR – Cascavel, deposited in herbarium under nº HEUP – 2285. The total phenolic compounds were determine in aqueus extracts of three different concentration by spectrophotometry using the Folin reagent – Ciocaltrau standard curve and rutin. All analyzes were made in triplicate. The results were analyze using ANOV/tukey (p<0,05).

Results/Discussion: The equation obtained through the standard curve of Y = -0.116 rutin was R² = 0.928 + 0.445. The values obtained for dilutions: 1.0, 0.5, 0.25 and 0.125 mg / mL were respectively 3.22 ± 814.14, 844.53 ± 2.74, 0.00 and 860.09 ± 874.69 ± 1.01 mg rutin equivalent per mlof extract. All concentrations evaluated extract showed high levels of phenolic compounds, when compared with data from other plants described in the literature. Sousa et al. (2007) found values of 66.14± 3.56 for dry extract of leaves *Cenostima macrophyllum* and 97.6 ±0.70 for leaves of *Terminalia fagifolia*. The phenolic compounds present in plants are the main components with antioxidant activity, although not the only ones.

Conclusion: Based on these results, it can be concluded that the extracts of rue leaves has high content of phenolic compounds.