



PHYTOCHEMISTRY AND *IN VITRO* BIOLOGICAL ACTIVITY OF BIOACTIVE COMPOUNDS FROM MEDICINAL PLANTS - POSTER 81

PHYTOCHEMICAL TRIAL AND ANTIOXIDANT EFFECT OF ETHANOL EXTRACT AND HEXANE FRACTION FROM *Smilax* sp. LEAVES

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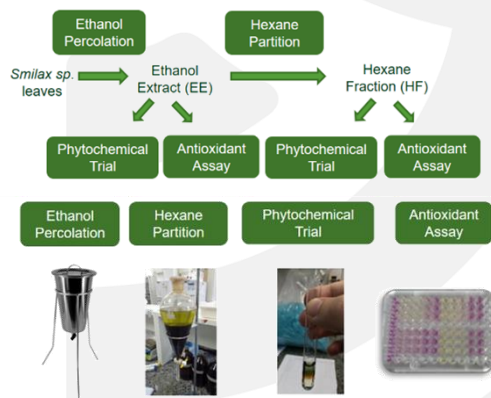
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1. INTRODUCTION

Species belonged to the Plantae kingdom produce secondary metabolites closely linked to their vital functions. These compounds can present biological activities with effects in other scenarios, such as in illness treatment [1]. *Smilax* genus (Smilacaceae) is formed by climbing trees species used in popular medicine for sexually transmitted diseases, antihypertensive effects, among others [2]. This work objective was to evaluate the presence of secondary metabolites and antioxidant activity of ethanol extract (EE) and hexane fraction (HF) from *Smilax* sp. leaves.

corroborated with the literature, in which *Smilax* species presented steroidal saponins and *p*-coumaric acid on their identified chemical profile. Furthermore, the antioxidant effect of stem and leaves from other *Smilax* species has already been described [5].

2. METHODS



3. RESULTS AND DISCUSSION

Steroids and coumarins presence was observed in EE, and steroids, triterpenoids, alkaloids, and coumarins presence in HF. Also, EE inhibited of DPPH in 38.67%, 40.22% and 51.40%, as well as HF in 34.24%, 35.85% and 37.26% at concentrations of 1, 10, and 100 µg/mL, respectively. Both samples showed higher DPPH inhibition than BHT at 1 and 10 µg/mL concentrations (Figure 1). These results

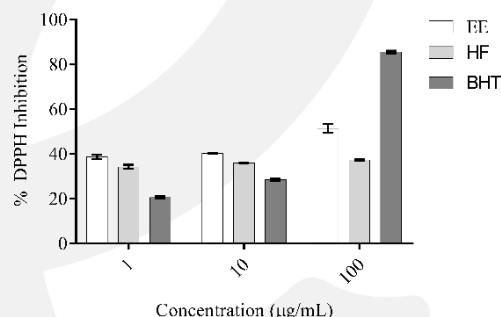


Fig. 1. Antioxidant activity of ethanol extract (EE) and hexane fraction (HF) from *Smilax* sp. leaves.

4. CONCLUSION

EE showed antioxidant activity that can be correlated with steroids and coumarins, as well as HF antioxidant effect can be correlated with steroids, triterpenoids, alkaloids, and coumarins.

5. ACKNOWLEDGMENT

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6. REFERENCES

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