Antioxidant Effects of Different Aqueous Extracts from Atemoya Fruit (peel, pulp and seed)

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INTRODUCTION: Fruits are important functional foods which have several biological activities among these antioxidant activity (SPs) stand out. However, several fruits were not evaluated as a source of antioxidant compound which makes its utilization of limited. Atemoya is one of these fruits. **OBJECTIVES:** Therefore, the aim of this study is to evaluate the functionality of this hybrid fruit (*Annona cherimola* X *Annona squamosa* L.): with respect to their antioxidant activities. **MATERIAL AND METHODS:** We got seed meal, peel and pulp of atemoia. These flours were macerated with different amount of water (1:2, 1:4, 1:8 e 1:10 g/v). The antioxidant activity was assessed using several methods like total antioxidant capacity (ATT), iron (QF) chelation, scavenging of hydroxyl radical (RH) and of the superoxide radical (IS). **RESULTS AND DISCUSSION**: We obtained 15 extracts and the largest amount of protein was found in the seed extract 1:10 (19,95 ug/uL), whereas peel extracts 1:4 and 1:2 have the highest amount of carbohydrate (1.74 ug/uL) and phenolic compounds (0.99 ug/uL). In ATT assay we stand up pulp extract 1:10 which showed 197.28 mg de ascorbic acid/ g of extract. The peel extract 1:8 and 1:10 were the most potent sample in RH (69%) and IS (65%) assays, respectively. We find that there is a positive correlation between protein and AAT e RH and phenolic compounds and ATT in seed extracts. In relation to pulp extracts there are positive correlation with proteins and carbohydrate components and ATT. Whereas with peel extracts there is a correlation between protein and ATT. **CONCLUSION:** Atemoia fruit showed antioxidant activity in different in vitro assay mainly due this protein content. Now in vivo assay will carry out in order to confirm these in vitro assay.

Word Keys: fruits, antioxidant, foods

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