

*Phaedranassa dubia* (Amaryllidaceae) source of secondary metabolites with biological activity as alternative for the treatment of Alzheimer's disease

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**Amaryllidaceae** is family of plants little studied in Colombia, some of which are in danger of extinction. Because of this high expectations have been created, since the marked biological activity of some secondary metabolites, particularly alkaloids, have shown antiviral and antitumor activity as acetylcholinesterase inhibitors associated with Alzheimer's disease [1-3], one of the most limiting scourge of humanity. These species urgently require creation of conservation and spread programs.

In this paper the enzymatic inhibition activity of hyaluronidase and acetylcholinesterase was evaluated [4-5], antioxidant activity by the Folin-Ciocalteu, DPPH and ABTS methods, cytotoxic activity by bioassay *Artemia salina* [2], and a chromatographic profile was performed. All assays were performed in total ethanol extract of leaves *Phaedranassa dubia*. These extracts showed enzyme inhibition of hyaluronidase (59.016%) and acetylcholinesterase (64.091%), which is directly related to the results of the chromatographic profile, as alkaloids such as Galantamine, Sanguinine and Lycorine were found, which have shown to be potent inhibitors of acetylcholinesterase. As for the antioxidant activity, favorable results for the three methods studied were found, observing that in leaves, the total phenolic content is considerably high. In toxicity it was observed that the extract is highly toxic.

**KEY WORDS:** Antioxidant activity; enzymatic activity; *Artemia salina*; **Amaryllidaceae**; *Phaedranassa dubia*.

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