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## PHYTOCHEMICAL COMPOSITION AND TOTAL ANTIOXIDANT CAPACITY OF *Anemopsis californica*

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**Introduction.** Tea made from *Anemopsis californica*, commonly known as yerba mansa, is used to treat various ailments including infections, heart disorders, asthma and cancer. Little is known about the identity or chemical nature of the bioactive substances and compounds responsible for the tea made from this medicinal plant<sup>1</sup>. However, some of the beneficial effects of this tea may be attributable to antioxidants.

In the present study the extracts from leaves, stems and rhizomes of the plant collected from Querétaro, México, were used to analyze the antioxidant activity and the presence of saponins, steroids and phenols (flavonoids, tannins and coumarins) through chemical reactions.

**Methodology.** Polar and non-polar extracts from leaves, stems and rhizomes of the plant collected from Querétaro, México, were used to analyze the antioxidant activity (ABTS•+ and DPPH• assays) and the presence of saponins, steroids and phenols (flavonoids, tannins and coumarins) through chemical reactions<sup>2</sup>. This experiment was designed based on a completely randomized design with triplicate using the least significant difference test at the 5% level ( $P < 0.05$ ).

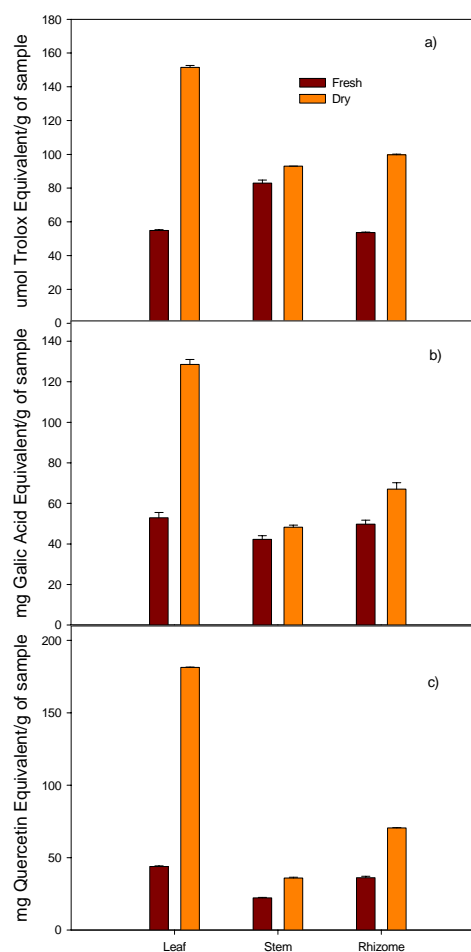
### Results.

**Table 1.** Preliminary phytochemical composition of the extracts from *A. californica*.

Cualitativo method	Leaf	Stem	Rhizome
Tannins	+	+	+
Steroids	+	+	+
Coumarins	+	+	+
Flavonoids	+	+	+
Phenols	+	+	+
Saponins	-	-	-

**Table 2.** EC50 from DPPH method in *A. californica* plant

Part of the plant	EC50 g/mL
Leaf	0.0564
Stem	Fresh 0.0345
Rhizome	0.0021
Leaf	0.0009
Stem	Dry 0.0007
Rhizome	0.0004



**Fig. 1.** Antioxidant activity with ABTS (a), total phenols (b) and flavonoids (c) of fresh and dry leaf, stem and rhizome from EC50 concentrations of *Anemopsis californica* extracts

**Conclusions.** *Anemopsis californica* has interesting compounds with medicinal properties and it will be useful to further analyze this plant in order to identify the active principles.

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