Inhibition of Cholinergic Contractions of Rat Ileum by Tropane-Type Alkaloids Present in *Schizanthus hookeri*

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The relative lack of specificity of atropine as a competitive antagonist of muscarinic receptors is a frequent cause of undesirable parasympathetic side effects. Consequently, new tropane alkaloids with potentially greater selectivity are usually seen with real interest. The cholinergic antagonistic effects of a purified mixture of tropane alkaloids extracted from *Schizanthus hookeri* were evaluated in rat ileum. For this purpose, ileal segments were obtained from randomly selected male Sprague-Dawley rats, and the effect of $1 \cdot 10^{-4}$, $1 \cdot 10^{-3}$, and $1 \cdot 10^{-2}$ mg/mL of the purified mixture of alkaloids on the contractile response of the ileum induced with increasing doses of carbachol ($5 \cdot 10^{-8} - 8 \cdot 10^{-4}$ M) was determined. The results were compared with those obtained in the presence of $3.46 \cdot 10^{-7}$, $3.46 \cdot 10^{-6}$, and $3.46 \cdot 10^{-5}$ mg/mL atropine as an agonist. Tropane alkaloids extracted from *Schizanthus hookeri* competitively antagonized acetylcholine muscarinic receptors.

Key words: Tropane Alkaloids, *Schizanthus hookeri*, Cholinergic Antagonism