The essential oil of *Vanillosmopsis arborea* reduces nociceptive behavior in mice in the corneal pain test

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**Introduction:** *Vanillosmopsis arborea* Baker (Asteraceae) has high economic value and antinociceptive properties due the presence of α-bisabolol in its bark essential oil. Keeping in view the high content of α-bisabolol in *Vanillosmopsis arborea* bark essential oil (OEVA), the aim of this study was to determine whether OEVA mitigates the corneal pain behavior.

**Experimental part:** Mice (n=8) were pretreated with OEVA 25, 50, 100 or 200 mg/kg (p.o.) or Morphine 5 mg/kg (s.c.). Acute corneal pain was induced by a local application of 40 µL of NaCl 5M on the corneal surface. The number of eye wipes was taken as a pain response and counted during the first 30s.

**Results/Discussion:** Oral treatment with OEVA (25: 15.33±0.91; 50: 15.33±0.91; 100: 16.67±0.84; 200: 16.67±0.66) and morphine (14.13±0.81) significantly (p<0.001)*** and (p<0.01)** decreased the number of eye wipes in comparison to Control group(20.88±1.20).

**Conclusion:** These findings indicated that OEVA attenuated hypertonic saline-induced corneal pain, probably acting via central mechanisms. The results of this study suggest that OEVA should be further investigated for the treatment of corneal pain.

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**Figure 1.** Effect on corneal OEVA in nociception induced by local application of 5M NaCl.

![Eye wiping test](image)

Representation on of the mean ± sem. N = 8, p < 0.001*** and p < 0.01** compared with the control group tested using one-way ANOVA followed by Test Student Newman Keuls.