



## Effects of Single Oral and Topical Administration of D-002 (Beeswax Alcohols) on Xylene-Induced Ear Edema in Mice

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**SUMMARY.** D-002 (beeswax alcohols) contains triacontanol as most abundant component. Local application of triacontanol has been shown anti-inflammatory effects on chemically-induced dermatitis and oral treatment with D-002 produced anti-inflammatory effects in carrageenan-induced pleurisy and cotton granuloma in rats, but its effects on xylene-induced mouse ear edema had not been studied. This study investigated the effects of single oral and topical doses of D-002 on this model. Oral dosing groups were composed by one negative control and six xylene-treated, one positive control, four D-002-treated (25, 50, 200, 400 mg/kg), and one indomethacin-treated (10 mg/kg). Topical dosing groups were conformed by one negative control and four xylene-treated, one positive control and three D-002-treated (2.5, 5, 10 %). Single oral doses of D-002 significantly and dose-dependently reduced edema formation and myeloperoxidase activity, but single topical applications unchanged both variables. Concluding, acute oral treatment with D-002 was effective to decrease xylene-induced mouse ear edema, but single topical doses were ineffective.

**KEY WORDS:** Beeswax alcohols, D-002, Edema, Inflammation, Myeloperoxidase, Xylene.

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