# Effective Treatment of Snake Mites

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## In the literature

Fuantos Gámez BA, Romero Núñez C, Sheinberg Waisburd G, et al. Successful treatment of *Ophionyssus natricis* with afoxolaner in two Burmese pythons (*Python molurus bivittatus*). *Vet Dermatol.* 2020;31(6):496-e131.

## FROM THE PAGE ...

*Ophionyssus natricis* is a common mite that affects captive snakes. Mite infestations can lead to irregularities in the scales, dysecdysis, anemia, and clinical signs such as lethargy and decreased appetite. *O natricis* may also be a vector for the arenavirus responsible for boid inclusion body disease.[1] Mites can be transmitted via direct contact with infested snakes or soiled substrate and furniture. Previously documented treatment options included pyrethrins and pyrethroids, fipronil, selamectin, and ivermectin; however, these therapies have associated risks and limitations and may not be recommended for every patient.

Afoxolaner is a commonly used oral treatment for fleas and ticks in dogs. This study evaluated the effectiveness of afoxolaner in the treatment of 2 Burmese pythons with *O natricis* mite infestation. Both snakes were treated with a single dose of afoxolaner (2 mg/kg body weight PO) through an orogastric tube. There was no evidence of live *O natricis* in either snake within 3 days, indicating rapid onset of action. Dead mites were found in the snake enclosures for up to 30 days. No adverse effects were observed.

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Because this is a single-dose treatment option, it allows for reduced stress due to less handling, lessened chance of toxicity, and elimination of risks associated with compliance failure of at-home treatments. In addition, measuring and administering an oral treatment is typically a more specific administration method as compared with topically applying drugs. Resistance has been reported with older acaricides but not with afoxolaner.

## … TO YOUR PATIENTS

Key pearls to put into practice:

1. It is important to verify *O natricis* mite infestation with morphometric identification under a microscope.
2. Care should be taken when tube-feeding oral medication to snakes. Staff should be comfortable with the procedure, and pet owners should be educated about possible risks, which include mucosal damage, esophageal perforation, regurgitation, and aspiration. When medicating via tube, it is important to flush the tube with enough food or fluid so the intended dose is fully administered to the patient (ie, none of the oral dose remains in the tube).
3. Rechecks should be performed 1 month following treatment to ensure no mites remain.

## Reference

1. Hetzel U, Sironen T, Laurinmäki P, et al. Isolation, identification, and characterization of novel arenaviruses, the etiological agents of boid inclusion body disease. *J Virol*. 2013;87(20):10918-10935.

## Suggested Reading

Sojka PA. Therapeutic review: isoxazolines. *J Exot Pet Med*. 2018;27(2):118-122.