Greetings from the ARAV Technician Liaison  
Issue 15, May 2014

Hello my Reptilian and Amphibian shugs,

This weather out here in the Midwestern United States has been insane lately! Much like my exothermic friends I don’t know whether to enjoy the sunshine or hold up in a hibernaculum! Hopefully, our other illustrious members are enjoying a better temperature range and have been seeing less patients with upper respiratory disease.

If you would like to stay up to date on what everyone around the world is treating currently, check us out on Facebook! Scan the code (yes, even from your computer unless you are reading this on your phone) or track us down! We have a members only group that you don’t want to miss!!

Your Herp Blerpin’ Tech,

Erica Mede, CVT

If The Black Speck is Moving You MITE Have a Problem!

Ophionyssus natricis, the reptile mite, also commonly known as the dreaded snake mite. Mites, just like ticks and lice, are arthropods and belong to the class Arachnida. They have eight legs and their bodies, very similar ticks, will engorge with blood from their host. This little arthropod is considered to be the scourge of the reptile community. These species specific parasites are notorious for infesting an entire collection of animals quickly and overwhelming owners, and clinicians, alike. We have all heard of these dermal terrors lurking between the scales of our patients, but there is a lot of information regarding the treatment of the environment to prevent reinfestation that technicians and new veterinarians alike need to understand about our mite-y foe.

The Life of a Mite

The reptile mite has five distinct life stages with the adult stage obviously being the most troublesome. Ideally, this species of mite require moderate temperatures (74-85 F) (23-29 C) and high humidity to complete their development from an egg, to a larva, to a protonymph, a deutonymph, and finally an adult. Adults will leave the host to lay eggs in the environment, especially untreated wooden surfaces. Typically this life cycle will take 2-3 weeks.

Pest Strips

Due to their relation to arthropods that traditionally bother humans, products such as organophosphate based pest strips that evaporate are effective in eliminating reptile mites in the home but should be avoided near animals.

Tips, Tricks, and Toys

Have a large monitor or crocodilian that needs an endotracheal tube but you don’t want them to crush it on recovery?

Use a piece of 1/2 - 2 inch PVC pipe cut about 2-4 inches long and bevel the edges to give it a nice rounded edge. These work great for preventing injuries to personnel and equipment upon surprise recoveries and scheduled recoveries.

- John G.
Drying and Freezing

Keeping reptiles enclosures in “unfavorable” conditions for the mites may help to treat the environment. All stages perish in temperatures over 105 F (41 C) or below 35 F (2 C) if kept consistently at these temperatures for a week. If there are wooden structures that you or your client prefer to save from an enclosure that has been infested with mites, a stint in an ordinary freezer will work just fine.

Drowning

Fortunately, reptile mites are not known swimmers and drown when introduced to water. This makes soaking the infested animal a very effective means of eradication but only for the areas that are directly in the water. Mites on the face may remain unharmed for the most part. It is recommended that animals be soaked for 20-30 minutes a day while mite infestations are ongoing. Full submersion of enclosure accessories is an option especially for larger pieces of cage furniture. Bleach can be added to further clean accessories but should NEVER be used with an animal in or near by the water.

Sprays

There are several commercial insecticide sprays available that seem to work well for environmental control. Sevin dust has been used with mixed results. Fipronil based sprays, such as Frontline, are good for environmental control but should not be used in the animals enclosure. Permethrin based products such as Provent-A-Mite work exceedingly well in the environment and make claims that despite being active for 30 days in the environment, is still safe for reptiles to dwell in the enclosure.

Carbon Dioxide Poisoning

There has been a recent surge in CO2 being used to treat entire rooms to kill off mites. The carbon dioxide container must be brought up to 10,000 ppm for 15 minutes. This of course will not only eliminate the mites but will also eliminate all forms of animal (and human) life. The room MUST be vented before being re-entered and you MUST make sure ALL animals and personnel are out of the room.

Predatory Mites

It has been hypothesized that the introduction of the mite *Hypoaspis miles*, a soil dwelling mite often used as a biological pest control, into the environment will remove reptiles mites from the environment and prevent reinfestation as well. However, the use of this mite is limited to enclosures that maintain a warm and moist naturalistic environment.

Student Corner

Collin is happy to announce that there are updates being made to the student section of the website! This includes changes in student chapters, changes in externship and internship sites, as well as important life altering updates for you! Stay tuned for more information to unravel!

ABVP Announcement!

For all of you interested in becoming boarded in Reptile and Amphibian medicine come visit the 19th Annual ABVP Symposium in Nashville, Tennessee October 30-November 2, 2014. Find out more information at www.abvp.com

Mark Your Calendars ...


October 18 – 24, 2014. 21st *Annual Conference of the Association of Reptilian and Amphibian Veterinarians*. This will be a concurrent conference with the American Association of Zoo Veterinarians and the Association of Exotic Mammal Veterinarians and will be held at Walt Disney World, Orlando, Florida.


Questions, Suggestions, or Articles can be Submitted to: [e.medecvt@gmail.com](mailto:e.medecvt@gmail.com)