

Presidential Pearls

The Duchess

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King Baboon Mousers

A person asked me about a female king baboon that was fed a half grown mouse. It bit the mouse, which died in less than three minutes. Only a small single fang mark could be found on the mouse. They wondered whether the venom or the fang did the mouse in.

As soon as I perform a divine pontification, some stupid spider comes along to trip me up! Darn!

There are always exceptions, and the Old World species seem to have an inordinate number of them. Check out:

<http://www.ucalgary.ca/~schultz/4laws.html>

Also, remember that a tarantula's fang is essentially a long, sharp cone. It does have a curve to it and there are rough parts and such, but that's its basic topology. It can slip into a mouse and slip out again without doing much damage at all.

Also, remember that a mouse's skin (and ours, too) acts a lot like a rubber membrane. When the tarantula's fang pierces the mouse's skin, one can imagine the point of the fang making an extremely small hole. As the fang continues to penetrate, the skin does not tear into a much larger hole. Instead, it stretches to accommodate the fang's increasing diameter. The tiny hole merely dilates.

At some point the tarantula may inject venom, and it's entirely conceivable that while it's preparing to attack the mouse it's already loading the venom canal with venom. Contrast this to the case where we surprise a tarantula. Here it might not have time to charge the venom canal before striking. Or, if it were merely interested in fending you off, not killing you (as

opposed to its intentions with a mouse), it may neglect to load the canal at all.

As the tarantula withdraws its fang, the mouse's skin, behaving like an elastic membrane, merely closes back up again. So do most of the tissues underneath that may also have been pierced including any blood vessels. Thus, regardless of how large the fang was or how deeply it penetrated, the resulting wound need not be very big at all. Indeed, it might be almost invisible.

Another consequence is that there would be very little bleeding. All the holes would have nearly sealed themselves as the fang exited. Take that, Hollywood, with the bloody fang sequences in your stupid tarantula movies!

Your hapless mouse may have been stabbed to the guts and received one hell of a dose of venom, and you'd hardly know just by looking at it, until you did an autopsy and found a hole that went 90% through the animal.

At least this is all a good story, no?

The Duchess

Many have mentioned The Duchess, our late, but extremely long-lived Mexican redleg tarantula. Extremely docile. Very laid back. She would move once a week, but only on a good day. You almost have to take a pulse before you began a conversation. I've only heard of one instance where one bit a human, and the victim reportedly experienced pain and swelling for a day or two but survived to brag to his/her grandkids about being bitten by the man eater.

We've only had one *Brachypelma emilia* try to bite on one occasion. We think that it was a "shot across the bow," warning us

that something serious was happening and she didn't want to be bothered. It was The Duchess, and she died a few days later.

They tend to be expensive, but if you want a pretty, long lived, docile tarantula that's extremely trustworthy to boot, get a *B. emilia*. Also, plan on writing her into your will. She'll probably outlive you!

Hates Vermiculite

Vermiculite vs. top or potting soil: Different strokes for different folks. It's a war that's been waging for a couple of decades now. That's almost as long as anyone has been seriously keeping tarantulas as pets!

If I gave out a brand name it probably wouldn't do any good. Every burg and hamlet has its own brands and most are not sold anywhere else. Besides, the brand name is irrelevant because one company may package several different brands or several different companies may package their product under the same brand name for a particularly large client, a big chain store for instance.

Much more important: Read the label. Vermiculite or perlite (two inert minerals) are irrelevant. If it mentions sterilizing, that's a good point. If it mentions fertilizers or fungicides or any other additives, avoid it like the plague.

Generally, the no-name stuff, the cheapest you can find in the local discount department stores, is the first stuff to consider. Farm and feed supply stores might be the next place to look. Look in a formal yard and garden store only as a last resort. Their stuff is going to cost more and is more likely to be doped with all sorts of high tech poisons.

As an aside, mushrooms (or any other fungus) growing in your potting soil tarantula cage usually means that you're keeping it too moist, unless you're keeping babies or a species that requires a swamp. Don't be terribly concerned about it though, because the common mushrooms

do them no harm. They just look weird in the same cage as a tarantula. Consider them as conversation pieces.

Tiny Creatures

Somebody always brings up mites. Mites can be a pain, but can be avoided. The only common kinds of tarantulas that I have heard of that require moist or humid cages (I refer to them as swamp cages.) are *Theraphosa blondi*, the members of the African genus *Hysterocrates*, possibly the Costa Rican zebra, the king baboon and the cobalt blue. In addition, baby tarantulas with leg spans of one and a quarter inch or so should be kept in moist cages.

Virtually all others can tolerate if not thrive in semi-desert to desert cages, especially the Chilean rose tarantula, all North American *Aphonopelma*, and all species of *Brachypelma*. They all have hides that are thick enough to substantially retard loss of water through transpiration, and all will learn to drink from a water dish to replenish what little they lose.

The best way to control mite infestations is to keep your tarantulas as dry as they will tolerate. Their differential sensitivity to dryness is the only significant difference between tarantulas and mites in your cages.

So, your strategy should be:

1. Take samples of the "mites" to a biology lab and get them identified so we know what we're dealing with. We don't need to know the species (although that would be interesting), just the general group the creepy crawlies belong to.

2. Thoroughly clean the cage. Throw away all substrate. Sterilize or throw away all ornaments. Start out from scratch, brand new.

3. Keep the cage as dry as you can.

4. Inspect the cage frequently for recurrent infestations (the three o'clock in the morning with a flashlight trick).

5. Use predatory mites only if you have

a recurrent or persistent mite infestation problem, one that can't be controlled by more traditional means. Download:

<http://www.ucalgary.ca/~schultz/appendc.html>

and print off a copy. Look up cleaning, bleach, mites, sanitizing and vermin. Follow the instructions.

Spot The Male

When attempting to determine whether you have a mature male tarantula of just about any species, you are best advised not to look first for spurs on the tibia. Look for the club-shaped ends of the pedipalps instead. If you see the spurs consider it a bonus indicator, a confirmation, not the definitive character.

I say this because in several genera of tarantulas the mature males lack tibial spurs (*T. blondi*, *Cyclosternum fasciatum*, others). In others the spurs may be small and concealed by the long, dense bristles. This is particularly important when you are dealing with a species or genus that is new to the hobby. You may miss a mature male entirely by trusting that he will have the spurs when, in fact, the species lacks them.