Why Can't I use commercial mercury vapor bulbs for my reptiles?

>>I recently went to Lowe's and they had Mercury Vapor Bulbs that said on the box it produces Ultraviolet radiation. I have checked on line, and have found other bulbs not specifically made for reptiles claiming they are UVB producing Mercury Vapor Bulbs. I think you guys should look into this and possibly test the bulbs. Here in my town, there is a petstore that will not seem to tell us were they get the UVB bulbs THEY USE!! They make up an excuse and don't even sell it at their pet store. It would be nice if you guys tested this bulb to see if it's true. Try these links http://www.XXXXbulbs.com/search.php on the link above if you scroll to the bottom you will find the kind the petstore owner uses its interesting, please don't spread the word until it's been proven. The reason I don't do it is because I can't afford a UVB meter, and don't know anyone that has one. Please email me back,
Thank you,<<

This question was actually sent to one of our members and forwarded to me. It's a really good question and deserves to be answered although it's not as simple a question to answer as one might think.

First off, all mercury vapor, metal halide, HP Sodium commercial lamps used for "people" have to have the UVR warning labels as stated by the EPA. Just because they have that does not mean that they will really produce any usable UVB for reptiles. All glass produced in the US has to be highly concentrated UVR blocking if used for commercial use.

Unless you have a meter it's very chancy using non proven name brands for your reptile. Even when we test an off brand, the results will only give you what that *one* bulb tests out at that time. The next of the batch of that brand can *(and has proven)* to be much different. There is no one demanding a consistent quality product line such as our ReptileUV would do. To trust your animal to non proven UVR products wouldn't be a wise move.

If you plan to keep reptiles for any length of time and don't want to pay the price for name brand, **only owning one of the 6.2 Solarmeters (link) will assure you of providing a safe level of D3 producing rays.** Even with that, the 6.4 meter will assure you that the UVB is in the correct area to do so.

The bulbs mentioned at the top have a long history. I have copied some of the notes that have been posted at the meters group on just this subject. It just so happens that I did send Frances Baines (link www.uvguide.co.uk) two of these bulbs to test. Because the "New and
Improved" design bulb that claimed to be a Halide gas tube with better light quality (LINK to halide lights and reptiles)) didn't test out well on my 6.4 IU meter, I thought that the Chinese somehow managed to manufacture a "SB" or self ballasted metal halide bulb when we couldn't as they state in the information heading on the stated website. Not so it seems from the test results on the spectrometer. These are not halide bulbs but mercury vapor bulbs with less ultraviolet in the D-UV range (290-305nm)

In all honesty, I have tested a few inexpensive china bulbs that have produced good UVB. Generally they are the clear commercial globe style and will only work well if in the right size dome (LINK To dome testing). Without the right shape and size dome to reflect the UVB, the results can be disastrous in both too much UVB and too little. The answer is again, only having a meter (link) will allow proper use of the inexpensive bulbs that do produce good UVB. Frances will at some time have all this up on her UV Guide website.

So. simply put, buy a meter (or meters with the 6.4) and know what you are doing or buy trusted brand bulbs if you want to be confident that your reptiles are getting what they need.

>>Its interesting, please don't spread the word until its been proven.<<

Please spread this word. I'm getting a bit worn out caring for reptiles that have not been given proper UVR and lighting. as I write this I am getting ready to drive 10 hours round trip to visit one of my reptile vets, Dr Mitch Spindel of Animal Ark (LINK to his site) with a dieing iguana from metabolic bone disease related complications.

Post below from the Yahoo UVB Meters Owners Group (LINK to Group)

"XXXX Brite" has a long history. I tested the original XXXXBrites several years ago and they were useless. The original bulb was made for tanning but was or coarse to hot. It was then marketed for reptiles 2000-2001 (this is long before the MegaRay). It was a frosted globe. Two years ago XXX Reptile picked up this name bulb but the design was different. It was a clear faced spot lamp marketed as a "flood" (some here may remember this). On testing it I was blow away as it was more like my Zoologist bulb then anything I had seen before. It didn't last very long but I only tested two of them. The retailers refused to relabel the spot appropriately and told me that they breed bearded dragon's and these animals were in perfect health with the bulbs at 12" producing a minimum or 800-1000uW at that distance.

I just went to the XXX site and now see that they are (as XXXApple puts it) "New and improved" but they have a lower uW reading then the original down to 300-400uW but they don't use a distance. They still use
the “flood” for marketing purposes even though it’s a spot bulb pictured.

The "XXX Brite site just uses the "clear faced" or "frosted face" explanations. If these are truly halide arc tubes, they would have less total UVB then the original spots but they would also have right shifted UVB spectrum. Only Steve’s new Solarmeter 6.4 will really tell us (beside Fran’s spectra's).

I have tested every MV lamps that has ever been suggested for reptiles here in the states. I have found that if you have the meters (I now say meters for the 6.4), some of them will work very well for reptiles. But all most all the rest of them will not.

Buy good name brand proven bulbs (LINK to Frans site) or buy a UVB meter. Don’t gamble your reptiles health on inexpensive products.

BobMac