LIZARD LETTERS

Successful Treatment of Fungal-Infected Iguana Eggs

My wife and I have been keeping reptiles for a number of years. In the last eight years our hobby has become a fairly serious endeavor. We found that we could not only keep but we could breed our little friends quite easily because we live in South Florida and the climate lends itself to outdoor enclosures.

We started breeding green iguanas and several varieties of snakes. Over the years we had many successes and some failures. After much research and hard work we arrived at what we believe to be a very good success rate. We then took on some of the more exotic and expensive breeds. We now have breeding *Cyclura nubila*. In the past we experienced some losses during incubation to fungus forming on the eggs. This was disconcerting but we found no information on how to deal with the fungus once it had begun to form on the eggs. With the *Cyclura* eggs this became not only disconcerting because we did not like losing the eggs. I am not referring here to non-viable eggs but to eggs that were fertile which subsequently would develop a fungus during the incubation period.

In 1995 we were incubating 16 *Cyclura* eggs. All eggs appeared healthy and viable. The eggs were from three different clutches. Each clutch was kept in a separate sealed plastic container in an incubator. The containers were set up with a 50:50 mix of sterile vermiculite and water (by weight) and maintained at a constant 86°F. Each container was about half full of the vermiculite mix. The eggs were set into the mix to half their depth. Every three days the containers would be opened for a few seconds to allow a change of air.

At two to three weeks I first noticed a spot of fungus forming on one egg. It was approximately 0.5 inches in diameter. I attempted several times to gently wipe the fungus from the egg. After repeated attempts over several days, the egg developed a brown spot under the fungus about the same size. Within a week the egg collapsed. Upon removal from the container we opened the egg and found the contents to be hard, similar to what a hard-boiled egg would look like.

A day or two later another spot developed on another egg in a different container. We tried the same things with similar disappointing results. Several days later a third egg—in the third container—started to develop the fungus. The eggs in the latter container belonged to a friend. I called to apprise him of the situation. During our discussion he suggested that we might try some sort of anti-fungal powder. When I got off the phone I went to the medicine cabinet and began to look for anti-fungal powder. Inspiration! I grabbed the athletes foot powder. At this point I figured it could do no harm. We were probably going to lose the egg anyway.

With a Q-tip I very carefully began to apply the powder each day to the spot on the egg. While doing this I noticed some tiny mites or bugs around the spot. I also brushed them with powder. Within three days the fungus stopped growing. The brown spot remained on the egg. On several occasions during the incubation period I would find fungus beginning to grow again on that egg. Each time I would apply the powder and the fungus would stop forming. This really brought my hopes up that the egg would hatch. The one thing that continued to concern me was that as the other eggs increased in size the "spotted" egg never grew. But I am pleased to report that at the end of the incubation period the little egg with the big spot hatched and the baby, albeit slightly smaller, seems in every way to be quite healthy and growing well. I examined the egg casing and found that the brown spot went right through the egg. It is my belief that the anti-fungal powder did indeed save that egg. In the future I hope I will never lose another viable egg to fungus.

I am including the brand name and active ingredient because I do not know what effect other products might have in similar circumstances. The product I used was Lotrimin AF (anti-fungal), with 2% Miconazole Nitrate. I hope that this information is useful to other amateur herpetoculturists. This use of anti-fungal powder may be familiar to professionals, but I have never encountered anything written about this procedure.

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We suggest opening the egg containers daily during incubation to allow greater air exchange.

Editor