Reptile eats Reptile

Text and photos by Tony O’Dempsey

In May 2010 while I was photographing Alstonia trees for My Favourite Plants articles in Nature Watch, see Volume 18(3), my attention was drawn to a small disturbance nearby. Upon investigation, I was rewarded with the scene of a Kopstein’s Bronzeback (Dendrelaphis kopsteini) envenomating a Green Crested Lizard (Bronchocela cristataella). This is not something you see every day, so I settled down in a comfortable position nearby and videoed the whole process of envenomation through to consumption of the prey. I did manage to take a few stills as well and some of these are included here.

Bronchocela cristataella is a member of the Agamidae family. It generally lives in trees and hunts insects and possibly other small reptiles. It is also able to change colour.

Dendrelaphis kopsteini is a member of a genus of arboreal snakes known as bronzebacks. Notice the long thin body structure. The snake typically injects just behind the head of the prey.

Notice the Dendrelaphis kopsteini’s long thin body structure.

The snake typically injects just behind the head of the prey.
nature. Bronzebacks are members of the Colubridae family whose venom fangs are located at the back of the jaws. As you can see, the snake needs to inject the venom with a wide gape and typically injects just behind the head of the prey where it is not only most effective but also presents less risk of injury to the snake. It is likely that the initial phase of capture involved the snake coiling around the prey to restrict its movement during the initial stages of envenomation, which in this case I had missed.

In Baker & Lim (2008) we stated that the Kopstein's Bronzeback and the other *Dendrelaphis* snakes are ‘apparently non-venomous’. We now know that *D. kopsteini* and possibly other bronzebacks are in fact venomous.

Once the prey had succumbed to the venom, the bronzeback manipulated the body into position and proceeded to swallow the lizard headfirst by ‘walking’ its jaws over and down the body. Before the last few centimeters of the lizard’s tail had disappeared down the snakes throat, the bronzeback lifted its head, complete with the lizards tail hanging out and moved off into the nearby trees. *Dendrelaphis* species are arboreal snakes and are at great risk of predation from birds, other snakes and monitor lizards when they venture down onto the ground. I suppose the opportunity to dine on Green Crested Lizard was worth the risk, as this bronzeback would not need to eat again for several weeks. 🐏

Above and below: The snake swallows the lizard headfirst by "walking" its jaws over and down the lizard’s body.

REFERENCES

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