

THE REARING AND BREEDING OF *DENDROBATES AURATUS* IN CAPTIVITY

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Two specimens of *Dendrobates auratus* were obtained in the Spring of 1984. They were housed in a 90cm x 50cm x 30cm all glass vivarium. This was furnished with a layer of charcoal, a layer of John Innes No. 1 potting compost and a layer of gravel. Pieces of cork bark were placed upright against the back and the following plants allowed to grow profusely:- *Scindapsus aureus*, *Philodendron scandens*, *Peperomia*, *Cordyline terminalis*, and parts of the floor were covered with growing sphagnum moss.

The substrate was kept sodden and the vivarium sprayed twice daily with tepid water. Heat was provided by two 60 watt spot bulbs thermostatically controlled and extra light given by means of a 30 watt fluorescent tube. Daytime temperatures were 28°—29°C, lowered at night to 22°C. In Spring and early Autumn the vivarium receives direct sunlight for approximately thirty minutes in early morning and again in late afternoon. Food consisted of fruit flies (*Drosophila*), tiny crickets, tiny mealworms and "buffalo" worms (*Alphitobius diaperinus*). White-worm (*Enchytrae*) were given occasionally by placing them on leaves and allowing them to crawl downwards.

Both specimens were discovered to be males as they were observed calling throughout most of 1985 (very little calling having taken place during 1984). On 27th April 1986, a new male and female were introduced. Almost immediately the frequency and intensity of calling increased, and the males were observed dashing about the vivarium with the female in pursuit. She seemed to pay more attention to the new male. On 8th June 1986, mating behaviour between the female and new male had been intensive for most of the day with much foreleg movement resembling beckoning by the female and both sexes frequently entered an upturned piece of coconut shell. This had been introduced after reading the article by Wagner and Slavens in the BHS publication "Reptiles — Breeding, Behaviour and Veterinary Aspects". The coconut shell was placed on a large watch glass on which was a leaf-shaped piece of green plastic sheet partly covered by a piece of well-soaked paper towel.

About 8.30 pm on the 8th June five eggs were discovered on the paper towel. Both towel and eggs were removed to a small styrofoam tub with perforated plastic lid. Water was added until just lapping the base of the eggs, and then the tub left in the vivarium. Two of the eggs developed fungus within two days. By 15th June a third egg developed fungus, but the remaining two were showing signs of development. By 26th June one tadpole had wriggled out of the jelly and two days later both were free swimming so they were removed to individual plastic margarine tubs containing 2cm of water. The tubs were then placed in a wooden vivarium with a temperature range similar to that of the adults. A small piece of freeze-dried brine shrimp was given each morning, the tadpoles being transferred to clean containers of aged water each evening. By 26th July the rear legs were well developed and the front limb buds visible. By 2nd August the green colouration was beginning to show and a day later one specimen had all four legs. The following day both were transferred to a small aquarium with half land, half water. Metamorphosis of one specimen was complete by 7th August and it had left the water. The second specimen completed metamorphosis on 8th August. Fruit flies were supplied but the froglets were not actually observed feeding until five days later.

Meanwhile, in the adult vivarium, the males were heard calling on 2nd August and during the next few days there was increased activity. On 8th August the female laid twelve eggs, which were probably not fertilised since they all developed fungus.

At the time of writing (August 31st 1986), the two froglets are thriving, measuring 14mm and 16mm on a diet similar to that of the adults.