

THE COMMON ASIATIC TREEFROG (*RHACOPHORUS LEUCOMYSTAX*): CARE AND BREEDING IN CAPTIVITY

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INTRODUCTION

This robust frog is occasionally available from dealers under various English names. These include Golden Treefrog and Asian Flying Frog; this can be very confusing as the former name is more correctly applied to *Litoria* (= *Hyla*) *aurea* and the later to *Rhacophorus reinwardtii*. Despite this it must be said that this frog frequently displays a golden colouration and although it does not have the extensive webbing or skin folds normally associated with the flying frogs it is a prodigious leaper. This leaping ability certainly at times (particularly when trying to chase one around a room) seems at least as good as flying!

It is unfortunate that this frog does not appear to have achieved the popularity in captivity of many of the *Hylidae* as it offers many advantages. Amongst these are a tolerance (although not necessarily the enjoyment) of a wide temperature range, ease of maintenance and feeding, high resistance to the common amphibian diseases, and an attractive appearance. Additionally, although they are primarily nocturnal it is common for them to be active in daytime.

SPECIES DESCRIPTION

As adults the males are about 50-60mms in length whilst the females can be 1½ times this size and considerably bulkier – easily equal in size to if not exceeding a mature Common Frog (*Rana temporaria*). The “normal” colouration is a beige to creamy gold with darker markings on the back consisting of longitudinal stripes or an ‘X’ or ‘Y’ shape towards the front. There is a thin dark stripe running from the eye to just behind the foreleg and the backlegs display dark transverse bands on top and a lighter mottled or marbled effect beneath. Like most frogs the colouring can vary widely. An almost pure gold at one extreme can change to what can best be described as a blotchy brownish grey. (Photograph-Zimmerman, 1986).

These frogs are highly vocal. The males call frequently during the evenings with either a short clicking sound or a more prolonged trill. The female appears to be voiceless with the exception that on occasion she has when touched opened her mouth and emitted what can only be described as a human scream. It may be that this is an attempt to deter predators. It certainly deterred this herpetologist the first time it was experienced!

CARE AND BREEDING

A number of tadpoles of this species were reared on behalf of a colleague and the newly metamorphosed treefrogs were housed in an aquaterrarium measuring 60 cm. square and 90 cms. in height. About a third of the floor area was water to a depth of 15 cms. and the remainder filled with peat topped with bark chippings to a similar total depth. Within this were planted *Scindapsus*, *Dieffenbachia*, *Maranta* and *Vriesea* to provide climbing and hiding places with broad leaves overhanging the water for spawning purposes. The plants were supported by twigs and a moss covered branch. Daytime lighting was provided by an ordinary fluorescent tube with an external drive and heating by a thermostat controlled blue lightbulb within the range 22-30 deg. C. The water was filtered through a power filter and returned via a small waterfall in an attempt to increase humidity. An aquarium heater set at 22 deg. C. was fitted.

The froglets were fed initially on hatchling House Crickets (*Acheta domesticus*), Fruit fly (*Drosophila* sp.), Buffalo Worms (*Alphitobius diaperinus*), and small Mealworms (*Tenebrio molitor*). Growth was rapid and was reflected in food size and type which included many a passing moth. After about four months it was possible to differentiate sexes by size alone. At this stage 2 males and a female were retained in the hope of successful breeding. Spasmodic calling from the males was already heard. This calling intensified gradually reaching a peak

as the frogs were approaching 9 months old in September. Attempts were made to encourage breeding by frequent spraying and although amplexus was frequently observed nothing came of it. It was notable that even though the frogs were in a centrally heated house increases in calling and amplexus were most commonly associated with times of rainfall and low barometric pressure. Unfortunately it was beyond my capability to influence the latter so as a consequence the frogs were left very much to their own devices. In October we suffered a power cut while out of the house resulting in the filter motor burning out. This caused a reduction in humidity. Nevertheless calling and amplexus heightened and about a fortnight later the frogs spawned. As these frogs were foam nesters it was anticipated that the nest would be hanging from a leaf or branch over the water but it was in fact stuck in a corner of the aquaterrarium – fortunately still overhanging the water. After about 4 days the first tadpoles dropped from under the nest which was heavily sprayed thereafter until hatching was completed. The tadpoles, totalling about 200, were surprisingly small in size – less than 4 mms. in length – and still carried a considerable egg yolk.

REARING OF TADPOLES

About half the tadpoles were removed to be reared in an aquarium, also filtered and heated, whilst the remainder stayed in situ. The tadpoles were fed principally on rabbit pellets with occasional fish flakes and pieces of lettuce leaf. As I had a large number of other tadpoles, rearing accommodation was limited resulting in a degree of cannibalism – a frequent problem with overcrowding. Nevertheless the majority survived, some reaching lengths of 40mms overall within a month.

Metamorphosis commenced at this stage, the newly emerged frogs measuring between 10 and 15 mms. Froglets continued to metamorphose over a period of about 3 months. The froglets were reared as described above and growth was equally rapid, resulting in the anomalous situation of frogs from the same brood measuring anywhere between 15 mms and 75 mms. In all, well in excess of 130 frogs have metamorphosed successfully. The vast majority of these have thrived despite crowding. Some of the males have already started calling at the time of writing i.e. at 4 months of age and it is confidently expected that further generations can be bred.

SUMMARY

These frogs have proved extremely enjoyable to keep. Once the accommodation is set up there is very little difficulty in their upkeep. Whilst their appetites are considerable this is made more tolerable by their willingness to eat almost any insect. There have been no health problems apart from an intestinal protrusion in one of the males which readily responded to being gently but firmly pushed with oily cotton wool (*Zimmerman, 1986*). The frequent calling is fortunately a rather pleasurable sound and tends to lull one to sleep rather than cause insomnia. I would thoroughly recommend them as their ease of upkeep and lack of tendency to hide in the most impenetrable undergrowth more than compensates for their lack of the bright greens associated with the more commonly kept species.

ACKNOWLEDGEMENTS

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REFERENCES

Zimmerman, E. (1986). *Breeding Terrarium Animals* T.F.H. Publications.