PYTHON REGIUS FROM FIRST GENERATION (F1) TO SECOND GENERATION (F2) IN CAPTIVITY

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INTRODUCTION

Python regius is a small python species from West Africa which is called Royal python or Ball python. The latter name is due to the fact that upon serious disturbance the animals curl themselves up like a 'ball', hiding their head between the coils of their body. This snake is regularly offered in the reptile trade. These animals are often caught from the wild and may exhibit a number of 'starting' problems. Many of these problems are caused by internal and external parasites (worms, ticks and blood lice) and by a general refusal to eat caused by the aformentioned parasites and stress as well as by amateurish handling by the buyer/owner (Van der Bijl, 1992; Mattison, 1988; Mehrtens, 1987). Due to these problems *Python regius* is often considered a difficult snake in the terrarium. However, during the last few years more and more succesful attempts have been made to breed this snake, showing that it should give no problems, provided that it is kept under the right conditions.

Until now, to my knowledge, nothing has been written about keeping captive-bred (F1) animals of this species in the terrarium. With this paper I want to put an end to this, as well as to add some extra information, that is breeding with F1 animals to F2 animals.

MY ANIMALS AND THE TERRARIUM

I own four captivite-bred specimen of *Python regius*. They consist of one male and two female (M1, V1 and V2), born in 1988 (M1) and in 1989 (V1 and V2), at Klein-Kiskamp (1989, 1993). The second male is a captivite-bred animal of the 'Stichting Koninklijke Rotterdamse Diergaarde' ('Blijdorp Zoo') in Rotterdam and was born in 1990. All animals were bought about one or two months after they were born. At the age of one year the sex of each of the animals was determined by probing.

Initially the young snakes were housed in little macrolon boxes 30x20x20 cm (lxwxh) in size. These boxes were placed on a heating cable which warmed part of the boxes for 24 hours a day. At the bottom of the box kitchen paper was placed. Furthermore, a little box and a water reservoir were placed in the box. Every two days water was sprayed in the boxes to maintain a high humidity. Once the animals were one year old, water spraying was done only during sloughing.

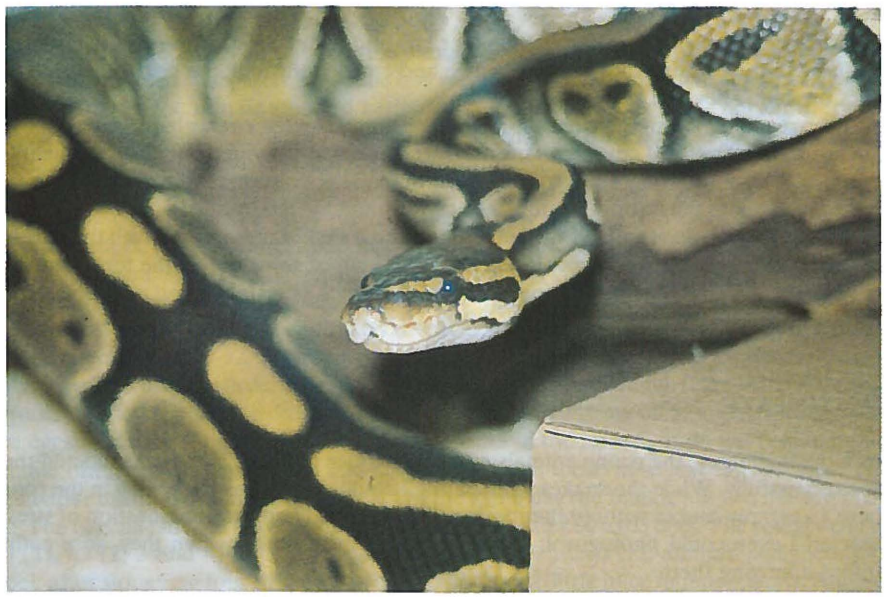

Foto 1: Python regius, man M2; male M2.
Foto C.M. Langeveld.

Foto 2: Python regius, uitkomende jongen; hatching youngs.
Foto C.M. Langeveld.

In the beginning the snakes were rather shy and spent most of the day lying in the little box. In the evening they became active and crawled through the box sometimes for hours on end. They still show this behaviour.

After reaching a length of about 60 cm, the animals were each placed separately in a terrarium of 80x40x60 cm (lxwxh). Each terrarium was provided with bottom heating covering about a quarter of the total bottom area. This bottom heater is on during the whole day. Besides the bottom heater, each terrarium is lighted by a 25W bulb for 12 hours a day during the whole year. Halfway in the terrarium a shelf is present on which the animals can 'sun bath'. The bottom is covered with about 3 cm of saw-dust. In the terrarium two boxes serve as hiding places. It is completed with a piece of walnut wood and a big water tray.

FOOD-INTAKE

From the beginning, the young animals eagerly ate mice of about two weeks old and they grew successfully. While the snakes were eating I could quitely go on working in the room where I keep my snakes without hampering the animals. There was no question of stress. Later on I even could photograph (using flash-light) the snakes when they were eating without annoying them.

The young animals ate the whole year through, with the exception of male 1, who fasted every year for a longer period. This fast lasted for 3 (1992), 5 (1990) or 7 (1991) months. During this fast mice and rats were regularly offered in different sizes and colours. When the snakes were about 80 cm in length, besides mature mice also young rats were offered, dead as well alive and in different colours. I feed the mature snakes once every two weeks two mice or young rats. Strangely, female 1 only eats mice, both coloured and white, and no rats. When I first offer her a rat with the size of a mature mouse or bigger, she refuses to eat or even strangle it. If after this I offer her a mature mouse, it is practically immediately killed and eaten.

BREEDING

In 1991 the animals were respectively about 100 (V1), 90 (V2 and M1) and 80 (M2) cm in length. Male 1 was a little bit behind in growth probably due to the various fasts. Male 2 was of course smaller due to its younger age.

I have taken no stimulating actions to breed the animals, except for placing the males with the females. I should remark that the terraria are placed on the attic. This attic heats up during the summer (30-34°C) and cools down during the winter (minimum temperature of 15°C). In addition, the room receives directly daylight. In October 1991, M1 and V1, and M2 and V2, respectively were for the first time placed together in a terrarium. After two days the males were taken away from the females. Later on, I repeated these actions for several times (see table).

Only M1 and V1 seemed to be attracted to each other which resulted in several copulations, which differed a lot in time length. M2 and V2 did not exhibit any mating behaviour. For this reason I stopped placing the animals together after three repeats. Apparently the male was too young or the female too small (or both).

Initially, I did not have the impression that female 1 was in gestation. She did grow thicker from about the middle of her body to the tail, but this could also be due to the enormous amount of mice she ate during the first months of 1992. From January 1992

on, a breeding place was installed for the female. This consisted of a plastic shoe box partly filled with sterilized sphagnum. This shoe box was placed on the bottom heater. From March of that year on, the female stopped eating and in April I saw her "sun" herself every day beneath the spotlight for a long period, a behaviour until then never exhibited by any of my animals. To me, these were the first signs that the female was presumably in gestation. At 20 April 1992, I was convinced that she was in gestation, since she laid in the shoe box on the heat cable, with her body twisted as if she was laying on her back. From that time on she swopped places between the 'sun-bathe' place and the plastic shoe box. On 26 April 1992, the female sloughed. Thirty days after sloughing, on 24 May 1992, the female layed five big, white eggs in the plastic shoe box. Her body was curled around her eggs. I took the eggs out of the terrarium and placed them in an incubator, in which they were hatched at a temperature of 29-32°C and a humidity of 100%. For incubating substrate sterilizeded sphagnum was used. In order to remove the eggs, I had to remove the female first. I thought it was remarkable that she did not defend the clutch by hissing or biting. After removing the eggs, I left the shoe box for another two weeks in the terrarium. In the beginning the female often crawled inside and laid curled as though there were still eggs present. This behaviour disappeared after one week. On the same day the female ate two mature mice.

The eggs all hatched between 23 and 26 July 1992, after 60 to 63 days. The young weighed 60 (1), 63 (2, 3 and 4) and 64 (5) grams. After eleven days the animals sloughed. One week after sloughing four of the five young pythons ate little mice independently. Number 5 ate only after 5 weeks independently. For that matter I did not force this animal to eat in the meantime. All five animals were rather shy. During daytime they laid in their hiding-place and in the evening they crawled around in their boxes. Two of the five animals were quite aggressive and could therefore not be handled without wounds. A big pair of forceps served as a solution for these animals. Five weeks after birth the four formerly mentioned animals shed for a second time. One of the young animals also ate after this sloughing 5-day-old rats. The youngs were housed in a similar way as their parents formerly.

END

From these data I think it can be concluded that *Python regius* can be regarded as an 'easy' snake to keep both as first (F1) and as second (F2) generation. Hopefully in the future more captive-bred animals, both first and second generation, will be available for amateurs. By directed breeding of these interesting pythons, the often illegal imports of these animals can be stopped or at least restricted.

LITERATURE

Bijl v.d., P., 1991. Het houden en kweken van de Koningspython *Python regius*. Lacerta 50 (2), 88-95.

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Mattison, C, 1988. Keeping and breeding snakes. 90-91. Blandford Press, London.

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Date	Time
221091	> 6 hrs
291091	> 1 hr
281191	> 17 hrs
081291	> 8 hrs
170192	> 1 hr
290292	> 8 hrs

Table: Copulations between male 1 and female 1; > = more than; time of copulations + or - 2 hours.

Translation: Cécile van der Vlugt.

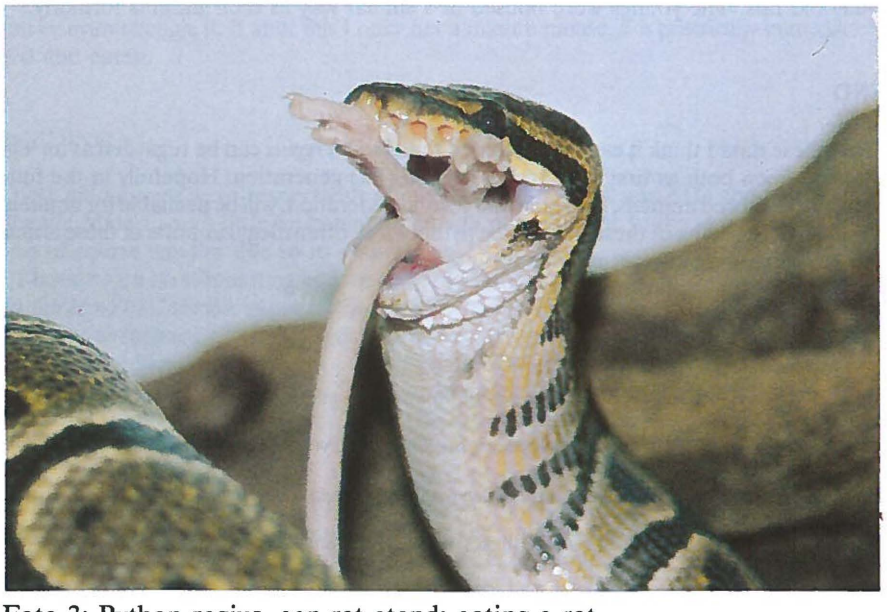

Foto 3: Python regius, een rat etend; eating a rat.
Foyo C.M. Langeveld.