

MARKING OF SNAKES : VALIDITY OF SCALE-CLIPPING TECHNIQUE WITH REFERENCE TO *Python Molurus*

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There are several methods used for marking snakes, such as; tattooing, tagging, photography and scale-clipping (Honegger, 1979). The first three techniques are expensive and less known, but scale-clipping is very widely used in zoos and field for individual marking of snakes for future identification. This technique was first used by Blanchard and Finster (1933) and involves clipping of subcaudal or ventral plate in various combinations. This technique is simple, inexpensive and does not require sophisticated equipments.

The scale-clipping technique was applied at Sayaji Baug Zoo, Vadodara, on a two-month old captive-bred *Python molurus* (n=9; x total body length=86.6 cm.), along with recording distinctive body-marks pattern with the help of photographs. I counted the left half of the 1st ventral (V) plate (from anal side, anal plate counted as zero) and counted as a code number one (cn1), then clipping of 2nd V=cn2; 3rd V=cn4 and 4th V=cn7; thus a clipping of 2nd V clipped denotes specimen no. 2 and 2nd V and 4th V clipped, would denote specimen no. 9 (Fig. 1).

After one year, it was difficult to recognize individual specimens, because all clipped ventral had regenerated. Then again same ventral plates were clipped and denoted by same code number together with the method of distinctive body marks. During three years, I have clipped ventral plates three times in all the nine specimens but they regenerated within 11 to 14 months. Also scale-clipping technique was applied on two adult pythons (x total body length 264 cm) but clipped ventral plates regenerated within 40 to 48 months and it was virtually difficult to recognize. But the method of distinctive body-marks pattern was quite useful for recognising individual specimens, the natural body marks pattern does not change or fade and it is long lasting.

Conant (1948), Fitch (1963) and Weary (1969) point out, some of the disadvantages in scale-clipping technique, it is time consuming, not permanent and has more possibility of infection. Also, not useful in less than 30 cm long snakes.

Present experience shows that, the scale-clipping technique is not very reliable for long term study in snakes, especially *P. molurus*. Recording of body marks pattern was emphasized by Bhupathy (1990) with a doubt about stability of body marks pattern with the age of the snake.

The conclusion is the recording of body marks pattern technique in *P. molurus* for further identification is most reliable and convenient for long term study (see box matter).

References

- Bhupathy, S. 1990. Blotch structure in individual identification of the Indian python *P. m. molurus* Linn. and its possible usage in population estimation. *J. Bombay nat. Hist. Soc.* 87(3):399-403.
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Distinctive pattern-technique for Identification of certain species of snakes

Advantages

1. It is simple, inexpensive, permanent and safe.
2. Painless and nearly stressless for both animal and the user.
3. Chances of infection or injury are nil.
4. Behaviour of animal (feeding, sloughing, courtship and mating) is not affected
5. No chance of negative criticism from zoo's visitors and staff.
6. Can be read from a distance, without disturbing the animals.
7. Adaptable to animals of all sizes.
8. Easy to use in captivity and wild.

Disadvantage - a limitation of the technique is that is not applicable in all species of snakes but only in certain species, such as *P. molurus*, which have distinct natural body-marks pattern.

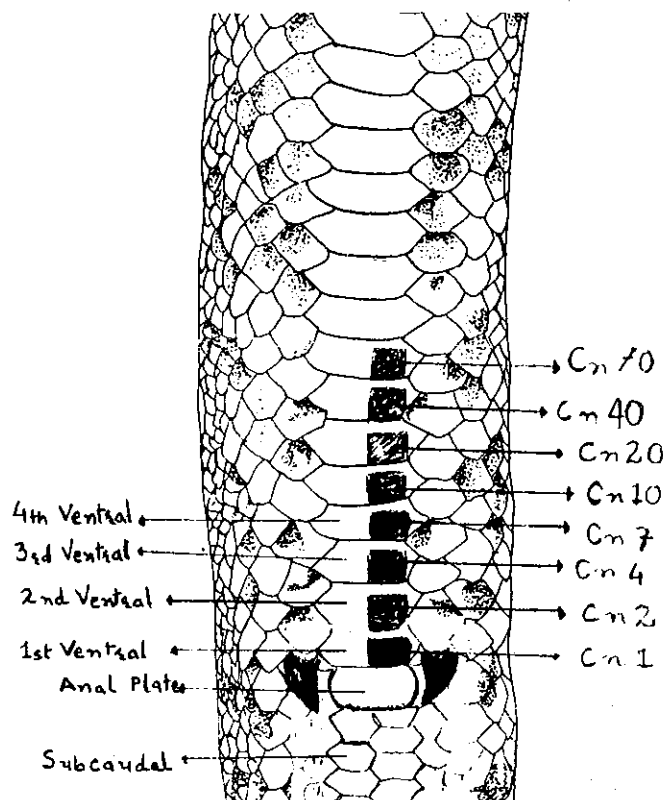


Figure 1. Scale-clipping method, the technique useful upto 100+ individual specimens of snakes for future reference.

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