THE RELATIVE POSITION OF THE PENIS IN SOUTHERN AFRICAN DASSIES (HYDRACOIDEA) AS A CHARACTER OF TAXONOMIC IMPORTANCE

C. G. COETZEE

Transvaal Museum, Pretoria

During a Transvaal Museum expedition to the farm Gesond (at the junction of the Macloutsi and Limpopo rivers, Tuli Block, Bechuanaland. 22° 12' S., 28° 54' E. June 1965) dassies of the two common species Procavia capensis Pallas, 1766 and the white-spotted rock-rabbit Heterohyrax brucei Gray, 1868 were collected. It was noticed that there is a distinct difference in the position of the penis in the two species. In Procavia the penis opening is situated immediately below the anus, while it is placed further forward in Heterohyrax. The distance between the anus and penis was measured in situ, measurements being as follows:

- **P. capensis** 25 and 20 mm (TM 14018 and 14078).
- **H. brucei** 65 and 70 mm (TM 14111 and 14114).

A possible application in taxonomy was indicated. The basic taxonomic problem in the Hyracoidea, however, does not concern the difference between Procavia and Heterohyrax brucei, but the grouping of the forms described as welwitschii Gray, 1868, tsuembensis Roberts, 1938 and otjiwarongensis Roberts, 1946. Roberts (1951) groups tsuembensis and otjiwarongensis as subspecies of welwitschii under the genus Heterohyrax. Ellerman et al. (1953) regard welwitschii as a subspecies of Procavia capensis, but consider tsuembensis and otjiwarongensis as valid subspecies of Dendrohyrax (Heterohyrax) brucei. Bothma (in press), working mainly on cranial characters in his revision of southern African dassies, regards welwitschii as a distinct monotypic species of Procavia with tsuembensis and otjiwarongensis as synonyms.

In view of this some of the existing study skins of dassies in the Transvaal Museum were checked for the penis character. The anus–penis length of these, measuring only skins showing the two points clearly, are:

- **H. brucei** 64.5 mm average, n = 9, range 53 (juv.) to 80 mm
- **P. w. welwitschii** 25 and 28 mm
- **otjiwarongensis** 27 mm (type)
- **tsuembensis** 22 mm (topotype)
- **P. capensis** 22.3 mm average, n = 10, range 15 to 32 mm
- **Dendrohyrax arboreus** no measurements available.

In addition a male Kaokoveld dassie (**P. welwitschii**, TM 15162), with an anus–penis length of 23 mm was collected at Kaoko-Otavi on 9 October 1965, during the return trip of a joint State Museum—Transvaal Museum expedition from the northern Namib.

These measurements and those given earlier show that *H. brucei* differ from *P. capensis* and from the Kaokoveld dassie. The position of the penis thus proves to be a character of taxonomic value and supports the conclusion arrived at by Bothma (in press) as to the grouping of *Hyrax welwitschii* Gray, with the genus *Procavia*.

REFERENCES

