

8 November 1982

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#### OCCURRENCE OF VENTRAL PROSTATE IN THE FEMALE GERBIL, *TATERA INDICA CUVEIRII* (WATERHOUSE)

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ALTHOUGH the occurrence of ventral prostate gland is not uncommon in rodents<sup>1</sup>, the presence of the glands in the Indian gerbil, *Tatera indica* Cuveirii has not been reported so far. The occurrence in the females is sporadic and its incidence is about 40 to 50%. Occasional occurrence of the glands has also been reported in the African field rat, *Arvicanthis cinereus*<sup>2</sup>; *Rattus norvegicus*<sup>2</sup>; African mice, *Mastomys erythroleucus*<sup>4</sup>; field mouse, *Apodemus sylvaeus sylvaticus*<sup>5</sup>; field voles, *Microtus arvalis*<sup>6</sup>; and African tree rat, *Grammomys surdaster*<sup>7</sup>.

The prostate glands in the female gerbil lie on the ventral side of the neck of the urinary bladder (figure 1). They are tubulo-alveolar in nature having paired lobes which extend on either side of the urethra and a single duct from each lobe opens into the urethra. In pregnant and lactating females, it often shows striking development. However, in the non-pregnant animals the glands are small and regressed. The glands enlarge during pregnancy and show secretory epithelium. The cavities of the glands are filled with secre-

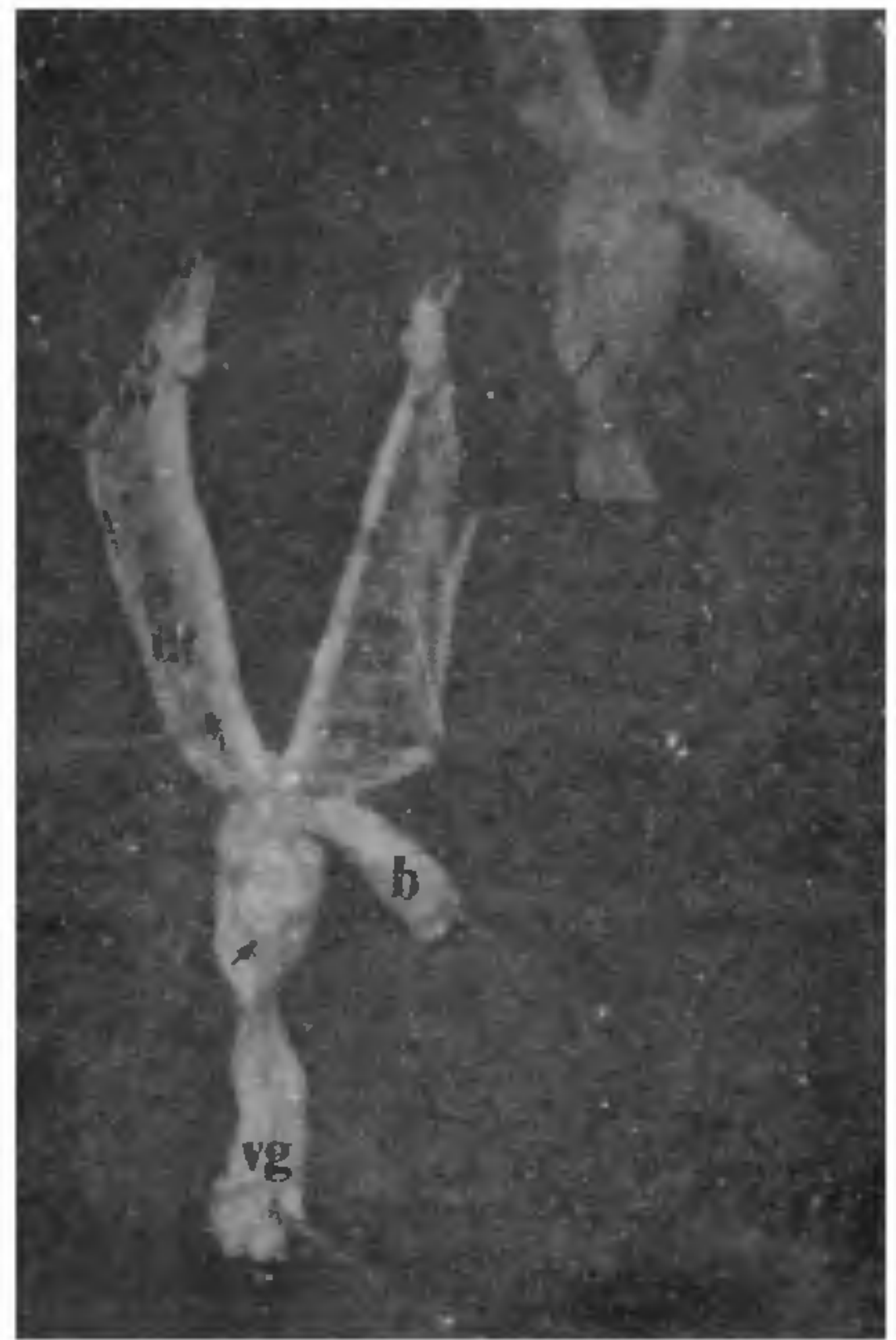


Figure 1. Female reproductive system of the gerbil, *Tatera indica* Cuveirii with an accessory ventral prostate gland indicated by an arrow. Inset, ventral prostate gland enlarged. O, ovary; Ov, oviduct; Ut, uterus; b, urinary bladder; Vg, vagina.

tions. This condition is maintained throughout pregnancy and lactation. A biochemical analysis of the glands indicates the presence of citric acid in the secretion. Further, when androgen is administered, the glands are stimulated and exhibit a high epithelium and the secretion of citric acid is enhanced. In the rat<sup>8</sup>, androgen is produced during pregnancy and lactation. Accordingly, the striking development of ventral prostate in pregnant and lactating gerbils can be explained when it appears stimulated by the endogenous androgen of ovarian origin<sup>9</sup>.

Thus, the female prostate gland of gerbil appears to be homologous with the ventral lobes of the male prostate glands. In addition, it is functionally equivalent to the male ventral prostate in the secretion of citric acid.

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22 September 1982

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## ANNOUNCEMENTS

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### VASVIK AWARD

The 1981 Vasvik Award has been awarded to Dr B. H. Katarki, Agricultural Research Station, Dharwad, for agricultural sciences and Prof. A. R. Vasudeva Murthy and Prof. G. Suryan, Indian Institute of Science, Bangalore, have been given this

award for their research in chemical sciences.

Each Vasvik award of Rs. 25,000 is for out-standing industrial research in fields ranging from agriculture to Technology. Gold medals and citations are given to each scientist winning the award.

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### THE ANNUAL SYMPOSIUM OF THE INDIAN SOCIETY OF DEVELOPMENTAL BIOLOGISTS

The Fifth Annual Symposium of the Indian Society of Developmental Biologists will be held from October 11-13, 1983 in the Department of Zoology, Meerut College, Meerut.

The Symposium will cover all fields of knowledge covering morphological, biological, molecular and genetic approach to the development of man, animals and plants. A discussion group will be organised to consider the relevance and application of developmental biology research/knowledge in India.

Full papers accompanied with three copies of abstracts (around 250 words) may be sent to Dr Suresh C. Goel, Secretary, Indian Society of Developmental Biologists, University of Poona, Pune 411 007, latest before August 29, 1983 but preferably in July 1983.

For all details of local arrangement please write to Dr. S. K. Agarwal, Convenor, Local Organizing Committee, Fifth Annual Symposium of ISDB, Department of Zoology, Meerut College, Meerut 250 001.

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