



Fig. 3. Detail from the two adjacent steroid-secreting cells in the same ovary as in Figure 1. Mitochondria with tubular cristae, vesicular features of the agranular endoplasmic reticulum, irregular lipid droplets.

The results confirmed explicitly the local and temporal coincidence of the positive 3β -OH-SDH reaction with the typical submicroscopical manifestation of steroid biosynthesis. In addition to the peripheral zone of thecal cells which begins to react on and after the 10th day, small groups of cells with the identical submicroscopical features and enzymatic reactivity appeared in the interfollicular spaces following the 12th day. The development of these cell groups by segregation from the theca coincides with the described development of the so-called primary, histochemically reactive interstitial tissue^{1,3}. Cytodifferentiation of the initially indifferent thecal cells, which in the beginning are indistinguishable from young fibroblasts, proceeds invariably in the direction of the peripheral thecal zone, and the fully developed steroid-producing cells are found close to the capillaries. Therefore, it is suggested that the stimuli for the cellular steroidogenic transformation proceed from the blood vessels rather than from the follicle. The hypothesis of the development

of the interstitial tissue cells from the follicular cells^{1,3} or from the interfollicular spaces pericapillary undifferentiated stromal cells² could not be confirmed⁴⁻⁶.

Zusammenfassung. Steroid-produzierende Zellen wurden in der Theca folliculi der geschlechtsunreifen Ratten vom 10. Lebenstag an elektronenmikroskopisch gefunden.

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⁴ A.B. DAWSON and M. McCABE, *J. Morph.* 88, 543 (1951).

⁵ E.G. RENNELS, *Am. J. Anat.* 88, 63 (1951).

⁶ H.-E. STEGNER, in *Gonadotrophins and Ovarian Development* (Eds. W. R. BUTT, A. C. CROOKE, M. RYLE; Livingston, Edinburgh-London 1970), p. 132.

New Chromosomic Base Number for the Himalayan Genus *Meriandra* Benth. (Labiatae)

The genus *Meriandra* is represented by 2 species in the Indian subcontinent (HOOKER¹) and 1 species namely *Meriandra bengalensis* is cultivated for its use in medicine. *Meriandra strobilifera* Benth. is a small woolly caespitose perennial shrub, commonly found on limestone outcrops in the West-Himalayas within an altitudinal range of 1200–2000 m.

A population (GILL 7578) of *M. strobilifera* from Naldehra (1200 m.) in the West-Himalayas has been found to have a haploid chromosome number of 9 (Figure). A constant gametophytic number of 9 has been obtained from several other populations from Solan-Kalka hills. The species is self compatible and self pollinating. Chromosome counts were made from microsporocytes following the method already described in a previous paper (GILL²). Voucher specimens are deposited at the Herbarium of Panjab University, Chandigarh (India).

Résumé. Nouveau nombre de base pour le genre du Himalayas *Meriandra* Benth. (labiales).

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Meriandra strobilifera ($n = 9$), first metaphase. $\times 1350$.

¹ J. D. HOOKER, *The Flora of British India* (Ed. L. Reeve and Co. Ltd., London 1885), vol. 4.

² L. S. GILL, *Phyton* 17, 177 (1970).