parts, the core and the sheath. The sheath of the terminal filament, described in the present study, is not at all comparable with the ovariole sheath described by Bonhag and Wick[1]. Structurally both of them are considerably different. The thin layered envelope of the sheath (Figs. 2 and 5, Sen) may probably be comparable with the outermost lamella of the outer ovariole sheath.

Brunt[2] has reported presence of cell membranes in the terminal filament of *Dysdercus fasciatus* but not the mitotic figures. Bonhag and Wick[1] also have not reported presence of mitotic figures in the filament. In the present study, both the cell membranes and mitotic figures have been observed in the terminal filament.

As stated previously, the ovariole is enveloped by two cellular sheaths, the outer sheath (Figs. 6, 7, 8, Ous) and the inner sheath (Figs. 7 and 8, Ins) respectively. The outer sheath consists of three to four layers of syncytial cells, the nuclei of which are oval in outline and show a well-defined nucleolus (Figs. 6, 7 and 8, Nu_5) and coarse chromatin granules. This sheath is invested by a large number of tracheal tubes (Figs. 6 and 7, Tr). The inner sheath is comparatively thin and unilayered. Its cells have elongated nuclei which neither show nucleoli nor coarse chromatin granules. They show a dense mass of chromatin bodies (Figs. 7 and 8, Nu_6). These observations entirely differ from those of Bonhag and Wick[1] and Brunt[2]. According to these workers, outer ovariole sheath has elliptical nuclei while inner one possesses oval ones. This difference is striking.

The vitellarium is composed of a series of seven to eight developing oocytes arranged in a single row (Fig. 1, Oc). Each oocyte is enveloped by the follicular epithelium (Figs. 1, 3 and 6, Fe). The successive follicles are separated from each other by interfollicular plugs derived from the follicular epithelium during early development (Figs. 1 and 4, Ifp). The plugs are basically formed of columnar cells having oval nuclei. The proliferated portions (Figs. 1 and 3, Ifp) of the follicular epithelium probably meet at one stage during the development to form 'plugs' and separate the successive follicles.

Bonhag and Wick[1] have suggested that groups of prefollicular cells which are trapped between successive follicles are the interfollicular plugs. Present study observes that the plugs are the derivatives of follicular epithelium. They are not groups of 'trapped' prefollicular cells. According to Brunt[2] follicular plug is the mass of follicular tissue.

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EFFECT OF RESERPINE ON THE GLYCOGEN CONTENTS OF THE UTERUS IN ALBINO RATS

BIOCHEMICAL effect of high dose (100 μg/rat) of reserpine was studied for glycogen contents in the uterus of female Albino rats. Decrease in glycogen contents has been noted for short duration. Successive depletion in glycogen content has been observed at increasing the duration of the dose.

Considerable attention is being paid to the development of non-steroidal postcoital antifertility agents. These cause inhibition in ovulation and ovo–implantation. It is generally agreed that reserpine causes an inhibition of the pituitary ovarian axis (Barraclough and Sawyer, 1957[1]). It is also observed that in the rat, the action of reserpine on ovo–implantation and pregnancy depends on the timing and doses (Tuchmann-Duplessis and Mercier–Parot, 1956[8]).

These active compounds have been studied extensively for their biological properties, but little efforts have been made on the biochemistry of the uterus under the influence of reserpine. Keeping in view the utility of these biochemical changes the present paper deals with the effect of reserpine on the glycogen contents of the uterus in Albino rats.

Material and Method

The reserpine used was 'Serpasil', Ciba; 100 μg dose of this was injected subcutaneously daily for the period prescribed for each group. Colony-bred Albino rats weighing 160–200 g were divided into three groups. The rats were maintained under uniform husbandry conditions throughout the experimental period. First group of rats received the drug for 6 days (1 cycle), second was administered for 12 days (2 cycles) and the third group was given drug for 18 days (3 cycles). Control rats were injected with the vehicles (distilled water) only. Vaginal smear, body weight and general activities were noted daily.

After 48 hours rest, the animals were sacrificed and the uteri were taken out and freed from connective and fatty tissues. The uteri were then blotted on filter paper to remove adhering fluid. A measured quantity of tissue (between 40 to 60 mg) was taken in a centrifuge tube with 1 ml of 30% KOH and glycogen was quantitatively estimated by the method of Seifter *et al* (1950) as described by Hawk[2].

Result and Discussion

Low doses of reserpine seemed not to affect the animal adversely, but 100 μg dose affected the eyes and caused decrease in food intake and loss of weight when administered for longer time. It is established that the uterine glycogen increases under the oestrogen stimulation among the Rodents[4]. Glycogen accumulates mainly in the myometrium and endometrium and act as an energy source for contraction of uterus[7].

Glycogen contents of the uterus of the control and reserpine treated rats are presented in Table I. With the increase in cycles, the glycogen tend to show a continuous drop in the uterus indicating the decrement in energy reserves.

TABLE I

Effect of 100 μg *reserpine on the glycogen contents of the Albino rat uterus*

Mean values in mg/100 gm tissue (± S.E.)

	No. of animals	Period of treatment in days	Glycogen contents
Control	7	..	11·06±2·15
Reserpine treated	5	1–6 days	9·15±2·44
	6	1–12 days	7·08±0·84
	4	1–18 days	4·55±1·09

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NATIONAL SOLAR ENERGY CONVENTION

National Solar Energy Convention of The Solar Energy Society of India (Solar Energy for Rural Development), organised by Central Salt and Marine Chemicals Research Institute, Bhavnagar; in co-operation with Bharat Heavy Electricals Limited, Central Elertronics Limited, Department of Science and Technology, Jyoti Limited and Tata Energy Research Institute; is to be held on December 20–22, 1978 at C.S.M.C.R.I., Bhavnagar.

The objective of the Convention is to provide in depth information in the new emerging field of Solar Energy, its relevance and scope in the rural development and to provide a forum to exchange ideas among participants.

The Convention will have nine sessions dealing with the following areas : (i) Photovoltaics, Photochemistry, Photobiology and Radiation; (ii) Solar Flat Plate Collectors; (iii) Solar Concentrators; (iv) Solar Thermal Power System; (v) Space Heating and Cooling; (vi) Energy Storage; (vii) Selective Coatings; (viii) Rural Applications and (ix) Industrial Applications.

Each session will start with an invited lecture from specialist in the field, who will review the state of knowledge in the area. One session will be devoted for Panel Discussion. A parallel Poster Session is also planned for all the three days. Visits to places of importance in solar energy research and development such as Anand and Baroda are proposed on 23rd December, 1978.

Detailes can be had from K. D. Pandia, Scientist, Publications, National Solar Energy Convention, C.S.R.I., Bhavnagar 364 002.