

## Letter to the Editor

### STUDY OF ANTIFERTILITY ACTIVITY OF THE LEAVES OF MOMORDICA LINN (KARELA)

Sir,

The plant *Momordica* Linn known as "Karela" is cultivated throughout India. It is also found in Malaya, China, tropical Africa and America. It is a climbing annual or perennial herb. Its fruits, leaves and roots are used in Ayurvedic Medicine for a number of diseases (2). The roots of *Momordica balsamina* are reported as abortifacient (1). The infusion or tea of the leaves and flowers of *Momordica charantia* is regularly taken each month by many West Indian women to avoid child birth through early abortion (3).

Freshly dried leaves of *Momordica charantia* (Karela) were powdered and boiled in distilled water for 30 min to obtain 10% extract. The extract at doses of 250 and 500 mg/rat (200-250 g) was fed orally to female rats every day for 7 days after successful mating. The details of the method have been described earlier (4). The number of the implantation sites was observed on day 10 of pregnancy under light ether anaesthesia. The aqueous extract (20 mg) was also injected subcutaneously to immature female rats (35-40 g) for three days. On the fourth day, the animals were killed and uterine horns were dried and weighed to ascertain whether the extract had any oestrogenic effect.

TABLE I : Effect of 10% aqueous extract of *Momordica charantia* on rat pregnancy

Treatment	Number of animals in the group	Number of animals having no implants on day 10 of pregnancy	Average number of implants per ani- mal of the group
Control	5	—	8.2
Aqueous extract			
250 mg/kg	10	—	7.5
500 mg/kg	10	1	7.2

The results obtained in Table I show that the aqueous extract of *Momordica charantia* has no significant antifertility activity in pregnant rats. When immature female rats were treated for oestrogenic activity, the mean uterine weight was  $47.0 \pm 3.2$  mg/100 g while in control animals it was  $48.82 \pm 2.8$  mg/100 g indicating that there was no oestrogenic activity in the extract.

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#### REFERENCES

1. Chopra R.N. and I.C. Chopra. "A Review of Work on Indian Medicinal Plants". Indian Council of Agricultural Research, New Delhi. P. 75, 1955.
2. Chopra R.N., S.L. Nayar and I.C. Chopra. "Glossary of Indian Medicinal Plants" Council of Scientific & Industrial Research, New Delhi, P. 168, 1959.
3. Morton J.F. The Balsam Pear—an Edible Medicinal and Toxic Plants. *Economic Botany*. **21** : 57, 1967.
4. Saksena S.K. and R.R. Chaudhury. Effect of orally administered azasteroids on implantation in rats. *J. Reprod. Fert.*, **19** : 177, 1969.

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