

Experiments with Plants alleged to be used as Abortifacients and Ecbolics by Natives.

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THE undermentioned plants, which are alleged to be used as abortifacients and ecbolics by the natives of Uganda, were submitted by the Director of Medical Services, Uganda, for investigation. It is stated that the pregnant women drink infusions prepared from about a handful of the leaves and roots of the plants and that their use is often attended with disastrous results.

In the experiments conducted at Onderstepoort the infusions were prepared by extracting 40 gm. of ground dry plants with 300 c.c. of tap-water for two hours at 50° C. On each day of the experiment the infusions were freshly prepared before dosing. As the infusions apparently had no effect on the pregnant rabbits the plant material itself was administered also with negative results.

CUCURBITACEAE.

Momordica foetida Schum.

Registered No.: O.P. 6856; 30.1.1936.

Common names: Zulu—inTshungu.

Uganda—Luyula.

State and Stage of Development.—Dry and in the flowering stage.

In South Africa the Zulus take an infusion or a decoction of the vines of the plant as a gastro-intestinal sedative (Bryant, 1909).

Pregnant Rabbit A (2·32 Kg.).—Received infusion equivalent to 20 gm. of dry plant daily for six days and 10 gm. of dry plant as such daily for three days.

Result.—Normal fully developed young were born on the tenth day of the experiment.

Pregnant Rabbit B (2·5 Kg.).—Received the same quantity of infusion and the same amount of dry plant material as rabbit A.

Result.—Normal fully developed young were born on the eleventh day of the experiment.

I might mention that on a previous occasion a non-pregnant rabbit received 100 gm. of the fresh immature fruit per stomach-tube within six hours without suffering any ill effects.

LABIATAE.

Leonotis americana.

Registered No.: O.P. Herb No. 6856 A; 30.1.1936.

Common name: Uganda—Kifumafuna.

State and Stage of Development.—Dry and in flowering stage.

Pregnant Rabbit A (2.3 Kg.).—Received infusion equivalent to 20 gm. of dry plant daily for four days.

Result.—Animal gave birth to three normal fully developed foetuses four hours after the fourth dose had been administered.

Pregnant Rabbit B (2.07 Kg.).—Received infusion equivalent to 20 gm. of dry plant daily for six days and 10 gm. of dry plant as such daily for three days.

Result.—Normal fully developed young were born on the sixteenth day of the experiment.

Pregnant Rabbit C (2.3 Kg.).—Received the same quantity of infusion and dry plant as such as Rabbit B.

Result.—Normal fully developed young were born on the fifteenth day of the experiment.

MALVACEAE.

Abutilon indicum Don.

Registered No.: O.P. Herb No. 6856 B; 30.1.1936.

Common name: Uganda—Kifura.

State and Stage of Development.—Dry and in flowering stage.

Pregnant Rabbit A (2.65 Kg.).—Received infusion equivalent to 20 gm. of dry plant daily for six days and 10 gm. of dry plant as such daily for three days.

Result.—Normal fully developed young were born on the thirteenth day of the experiment.

Pregnant Rabbit B (2.5 Kg.).—Received the same quantity of infusion and dry plant as Rabbit A.

Result.—The animal gave birth to normal fully developed young on the fifteenth day of the experiment.

The plant is indigenous to southern and eastern Asia, where its seed and bark are used medicinally. Its fibre is used commercially (Wehmer, 1931).

DISCUSSION.

From the above experiments it would seem that *Momordica foetida*, *Leonotis americana*, and *Abutilon indicum* in the dry state and flowering stage do not act as abortifacients on pregnant rabbits. The results of the above experiments, however, do not warrant the conclusion that pregnant women will not be affected by these plants as the pregnant human uterus may react to these plants in a way different from that of the pregnant rabbit uterus.

It also appears that the plants have no toxic effects on rabbits as they were administered in fairly large quantities.

Dr. C. Rimington, Onderstepoort, conducted preliminary tests for alkaloids and found slight positive reactions with *Leonotis americana* and *Momordica foetida*. No alkaloids were detectable in *Abutilon indicum*.

REFERENCES.

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- WEHMER, C. (1931). *Die Pflanzenstoffe*. Verlag von Gustav Fisher, Jena, Band II, 1931.