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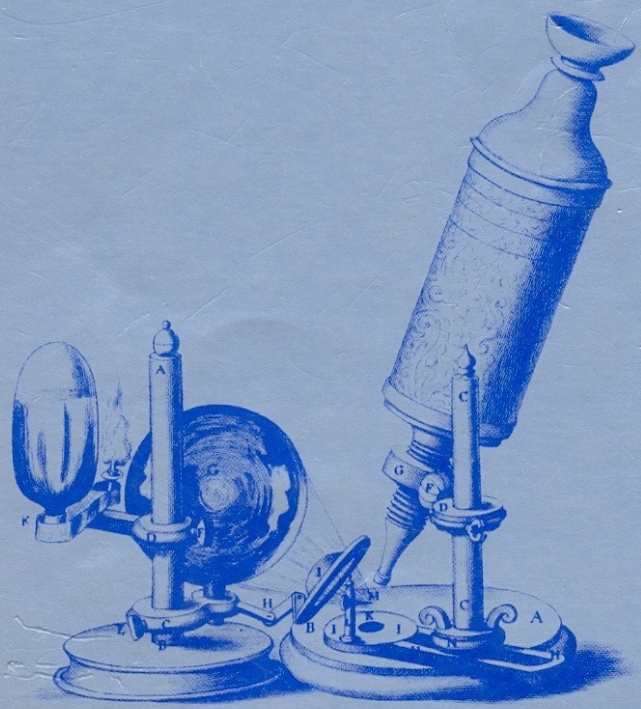

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ABSENCE OF EMBRYO-FETOTOXICITY BY THE LYOPHILIZED HYDROALCOHOLIC EXTRACT OF *Maytenus ilicifolia* Mart. LEAVES IN MICE

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Maytenus ilicifolia Mart. leaves are used in the Brazilian alternative and herbal medicine, particularly due to their antiulcerogenic effects, but they are also used, including in others regions of the South America, as an abortifacient. As many plants used to induce the abortion fail in their task and may promote malformations in the newborns, this study was designed to investigate if the *M. ilicifolia* leaves extract is embryo-fetotoxic. CF1 mice females received orally 1000 mg/kg/day of the lyophilized hydroalcoholic extract of the *M. ilicifolia* leaves between the 1st and the 3rd day of pregnancy (dop), the 4th and the 6th dop, or the 7th and the 9th dop. They were killed on the 18th dop and laparatomized. Corpora lutea, implantation sites, resorption sites and fetuses were counted. The fetuses were analyzed for external and internal malformations and skeletal anomalies. The number of implantation sites and fetuses decreased significantly with the administration of the extract between the 1st and the 3rd dop, indicating a pre-implantation embryonic loss. Malformations or skeletal anomalies were not promoted by the extract. A small projection at the forelimbs was frequently observed in the fetuses from treated and control groups (Fig.1), but only two cases of polydactilism were identified: in control fetus from experiments with administration between the 4th and the 6th dop, and in fetus of a female that received the extract between the 7th and the 9th dop (Fig.2). A fetus of a female that received the extract between the 4th and the 6th dop had exencephaly, exophtalmy and protruded tongue, and a control fetus from the experiment with administration between the 7th and the 9th dop presented exencephaly. To investigate if the pre-implantation embryonic loss was due to an embryotoxic effect by the extract, the females received the extract between the 1st and the 3rd dop and were killed on 4th dop. The embryos were collected by flushing and analyzed. The treated-female embryos were similar to the control embryos in their developmental stage and morphological aspect (Table 1). In brief, the extract of the *M. ilicifolia* leaves did not have embryotoxic or teratogenic effect in mice, even when administered during the organogenic period.

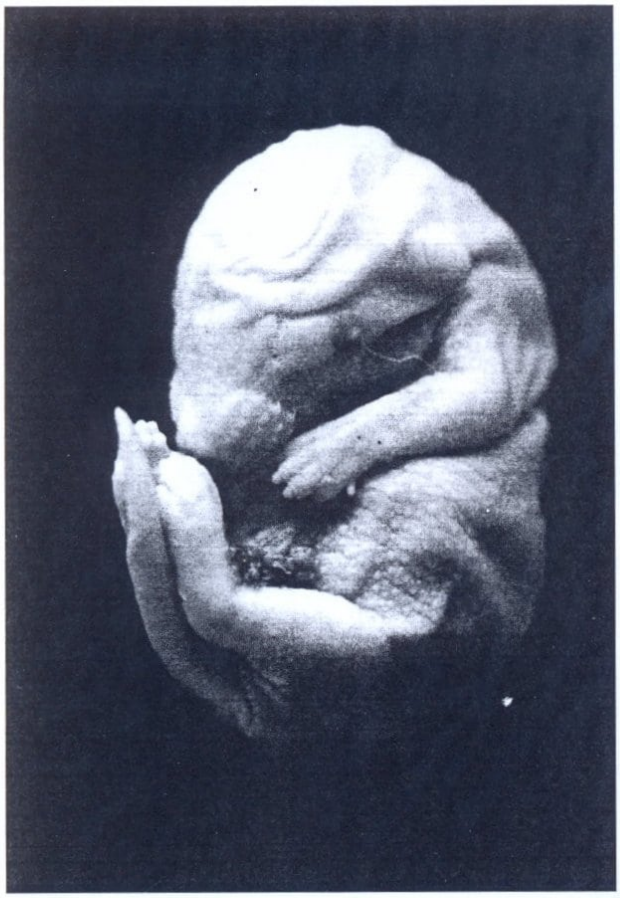

Figure 1 Fetus with small projection at the side of the little finger

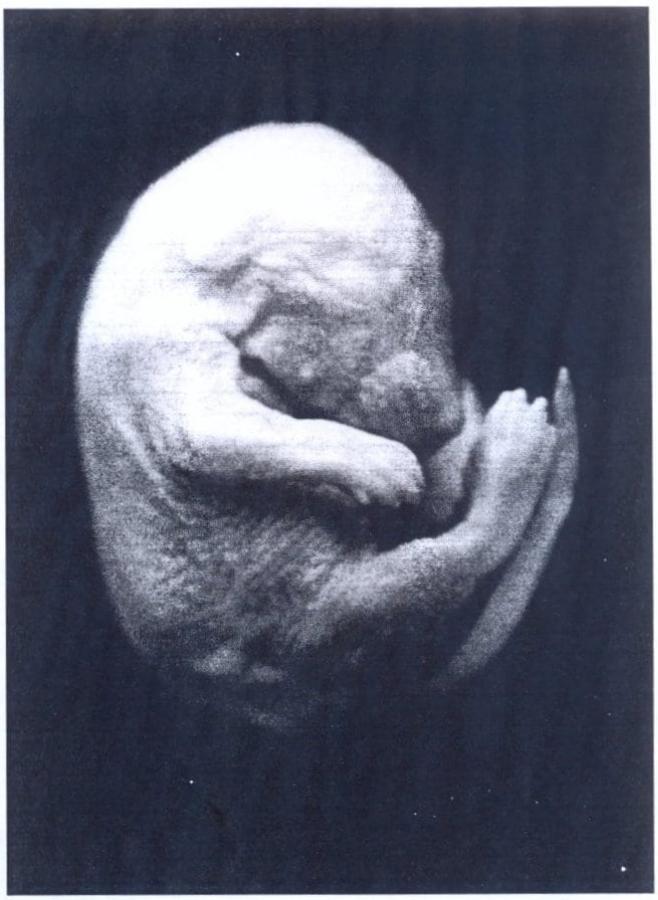

Figure 2 Fetus with polydactilism

Table1

Effect of the *M. ilicifolia* extract administered during the pre-implantation period on embryos

Group	Development phase			Morphological aspect	
	oocyte	2 cells to morule	blastocyst	normal	degenerate
Treated	2,5%	27,76%	69,74%	94,10%	5,9%
Control	3,08%	26,15%	70,77%	94,6%	5,38%