



Reproductive adverse effects of fipronil in Wistar rats

Ohi, M; Dalsenter, PR; Andrade, AJ; Nascimento, AJ

HERO ID
1418607

Reference Type
Journal Article

Year
2004

Language
English

<https://pubmed.ncbi.nlm.nih.gov/14643964/>

PMID
14643964

Feedback <https://epa.gov/reference/1418607/feedback/> **Log in to download**

HERO ID	1418607
In Press	No
Year	2004
Title	Reproductive adverse effects of fipronil in Wistar rats
Authors	Ohi, M; Dalsenter, PR; Andrade, AJ; Nascimento, AJ
Journal	Toxicology Letters
Volume	146
Issue	2
Page Numbers	121-127
Abstract	The purpose of the present study was to investigate possible reproductive adverse effects of fipronil (Frontline TopSpot) in female Wistar rats. The pesticide was topically applied to rats (single dose) at different concentrations (70, 140 and 280 mg/kg) and hormonal analysis, estrous cycle, and pregnancy and outcome data were determined. Treatment with fipronil altered cyclicity of female rats lengthening the estrous cycle (days) after a single topic administration of 70 mg/kg (9.7+/-1.18) or 280 mg/kg (14.5+/-1.45) when compared to control (4.8+/-0.17). In the mating study fipronil reduced the pregnancy index (67%) in the highest dose group (280 mg/kg). Plasma progesterone and estradiol levels, obtained in different periods after treatment with fipronil (70 mg/kg), were significantly different 96 h after treatment, when compared to controls. In summary, the results of the present study indicate that fipronil may alter the normal functioning of the endocrine system and cause adverse reproductive effects in female rats.
Doi	10.1016/j.toxlet.2003.08.008 <https://doi.org/10.1016/j.toxlet.2003.08.008>
Pmid	14643964 <https://pubmed.ncbi.nlm.nih.gov/14643964/>
Wosid	WOS:000187187300003 <https://www.webofscience.com/wos/woscc/full-record/wos:000187187300003>

Tags

No Tags Found

Is Certified Translation	No
Dupe Override	No
Is Public	No
Language Text	English
Keyword	Wistar rat; fipronil; estrous cycle; reproductive toxicology

[Contact Us <https://epa.gov/content/contact/>](https://epa.gov/content/contact/) for questions about HERO. Got feedback? [Report an Issue here.](#) Last updated on January 23, 2026