

Observations on the effects of feeding moldy corn to rats

ABSTRACT

Twenty rats (10 males, 10 females) averaging 35 g were randomly allotted, in groups of 5, to 2 treatments using fresh corn and corn purchased from a feed dealer and suspected to have high mycotoxins. The various organs were compared to determine the effects of the treatment on the development of the specific organs. The analysis of variance showed significant difference ($P < 0.001$) in average daily gain, average daily feed and feed conversion ratio for the 2 different treatments. There was also a slight treatment \times sex interaction. Rats fed fresh corn performed better than rats fed purchased corn. Male rats fed fresh corn performed better than female rats whereas the reverse was true for rats fed moldy corn. There was no treatment effect on liver size but liver weight was significantly ($P < 0.05$) different between sexes. Uterus weight of rats on different treatments were significantly different ($P < 0.001$) and depressed development of sex organs. Rats given moldy corn had larger kidneys ($P < 0.005$) than rats fed fresh corn.

Keyword: Corn; Rats