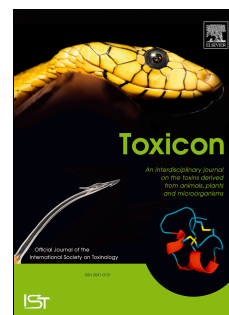


Accepted Manuscript

Experimental poisoning by *Vernonia rubricaulis* in sheep

Kelly C.S. Godoy, Paula V. Leal, Marcelo A. Araújo, Alda I. Souza, Arnildo Pott, Stephen T. Lee, Claudio S.L. Barros, Ricardo A.A. de Lemos



PII: S0041-0101(17)30340-9

DOI: [10.1016/j.toxicon.2017.11.002](https://doi.org/10.1016/j.toxicon.2017.11.002)

Reference: TOXCON 5759

To appear in: *Toxicon*

Received Date: 31 August 2017

Revised Date: 6 November 2017

Accepted Date: 7 November 2017

Please cite this article as: Godoy, K.C.S., Leal, P.V., Araújo, M.A., Souza, A.I., Pott, A., Lee, S.T., Barros, C.S.L., de Lemos, R.A.A., Experimental poisoning by *Vernonia rubricaulis* in sheep, *Toxicon* (2017), doi: 10.1016/j.toxicon.2017.11.002.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Experimental poisoning by *Vernonia rubricaulis* in sheep

Kelly C. S. Godoy^a, Paula V. Leal^a, Marcelo A. Araújo^b, Alda I. Souza^b, Arnildo Pott^c,
Stephen T. Lee^d, Claudio S.L. Barros^b, Ricardo A. A. de Lemos^b

^aPrograma de Pós-graduação em Ciências Veterinárias, Faculdade de Medicina Veterinária e Zootecnia (FAMEZ), Universidade Federal de Mato Grosso do Sul (UFMS), Av. Senador Felinto Muller, 2443, 79070-900 Campo Grande, MS, Brazil.

^bFAMEZ, UFMS, Campo Grande, MS, Brasil

^cLaboratório de Botânica, Centro de Ciências Biológicas e da Saúde (CCBS), UFMS, Cidade Universitária, s/n, Campo Grande, MS, 79070-900, Brasil

^dPoisonous Plant Research Laboratory, Agricultural Research Service, United States Department of Agriculture, 1150 E. 1400 N., Logan, UT 84341, USA

Keywords:

Sheep diseases

Poisonous plants

Vernonia rubricaulis

Acute liver failure

Hepatotoxicity

*Corresponding author.

E-mail addresses: k.c.s.godoy@gmail.com (K.C.S. Godoy)*, paulavleal@hotmail.com (P.V. Leal), marcelo.augusto@ufms.br (M.A. Araújo), aldaizabel@hotmail.com (A.I. Souza), arnildo.pott@gmail.com (A. Pott), stephen.lee@ars.usda.gov (S.T. Lee), claudioslbarros@uol.com.br (C.S.L. Barros), ricardo.lemos@ufms.br (R.A.A. Lemos)

ABSTRACT

In order to evaluate the susceptibility of sheep to *V. rubricaulis* and to establish the clinical signs, serum biochemistry, and pathological findings, eight sheep were fed varying doses of *V. rubricaulis*. The onset of clinical signs occurred 6-48 hours after the ingestion of *V. rubricaulis*. Clinical courses lasted 6-56 hours after the ingestion of the plant. Serum activities of aspartate aminotransferase, gamma-glutamyl transferase, and alkaline phosphatase were highly elevated and glucose blood levels were low in affected sheep. Clinical signs consisted of apathy, anorexia, dry muzzle, respiratory distress, abdominal pain, and mushy feces with streaks of blood and mucus. Two sheep had neurological signs including muscle fasciculation, nystagmus, paddling movements, and blindness. Liver necrosis could be detected antemortem through liver biopsy. Five sheep died and three recovered. The liver was affected in all necropsied sheep; it increased in volume and had marked accentuation of the lobular pattern with red, depressed areas intercalated with a pale yellow network. Ascites and

Download English Version:

<https://daneshyari.com/en/article/8394799>

Download Persian Version:

<https://daneshyari.com/article/8394799>

[Daneshyari.com](https://daneshyari.com)