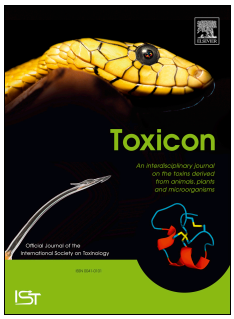
Accepted Manuscript



Transmammary transfer of toxicity to nursing kids from *Isocoma pluriflora* (rayless goldenrod) dosed to lactating goats

James A. Pfister, Bryan L. Stegelmeier, Stephen T. Lee, T. Zane Davis, Ben T. Green

PII: S0041-0101(18)30133-8

DOI: 10.1016/j.toxicon.2018.04.006

Reference: TOXCON 5855

To appear in: *Toxicon*

Received Date: 15 February 2018

Revised Date: 27 March 2018

Accepted Date: 1 April 2018

Please cite this article as: Pfister, J.A., Stegelmeier, B.L., Lee, S.T., Davis, T.Z., Green, B.T., Transmammary transfer of toxicity to nursing kids from *Isocoma pluriflora* (rayless goldenrod) dosed to lactating goats, *Toxicon* (2018), doi: 10.1016/j.toxicon.2018.04.006.

Transmammary transfer of toxicity to nursing kids from *Isocoma pluriflora* (rayless goldenrod) dosed to lactating goats

James A. Pfister[a]*, Bryan L. Stegelmeier[a], Stephen T. Lee[a], T. Zane Davis[a], and Ben T. Green[a]

[a]USDA-ARS Poisonous Plant Research Laboratory, 1150 E. 1400 N., Logan, Utah, USA 84341

Highlights

- Lactating goats were not adversely affected by rayless goldenrod administration for 14 days
- Nursing kids were variably affected, with serum creatine kinase concentrations being elevated for treated vs. control kids
- One treated kid had extensive myonecrosis that involved both myocardium and skeletal muscles
- No benzofuran ketones, the putative toxins, were detected in mothers' milk

---

Abbreviations: Creatine kinase (CK); Lactate dehydrogenase (LDH); rayless goldenrod (RG); body weight (BW); Aspartate aminotransferase (AST).

*Corresponding author: jim.pfister@ars.usda.gov. Tel: 435-752-2941.