

Supplementary material

Appendix A

A six-point scoring system developed to score the severity of tongue lesions, which was then used to guide treatment decisions.

Lesion score	Description	Treatment given
1	Lesion less than the size of a loonie (Canadian dollar coin; 26mm diameter)	Removal from ration, antibiotics given, and plan made for slaughter if at weight
2	Multiple lesions, each smaller than a loonie	Removal from ration, antibiotics given, and plan made for slaughter if at weight
3	Split tongue surface, not full thickness	Removal from ration, antibiotics given, and plan made for slaughter if at weight
4	Tongue tissue split through full thickness and hanging	Removal from ration, antibiotics given, and plan made for slaughter if at weight
5	Tongue tissue missing pieces	Emergency slaughter if at weight
6	Tongue tissue missing large portions	Emergency slaughter if at weight

Lesion score 1



Lesion score 2



Lesion score 3



Lesion score 4



Lesion score 5



Lesion score 6

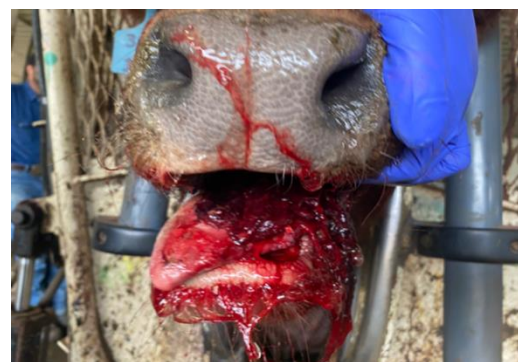


Figure S1 Necrotizing glossitis in tongues from affected cattle submitted to the laboratory.



Figure S2 A and B Necrotizing and ulcerative suppurative glossitis with abundant mixed bacteria (A Hematoxylin and eosin (HE) stain; B Gram stain).

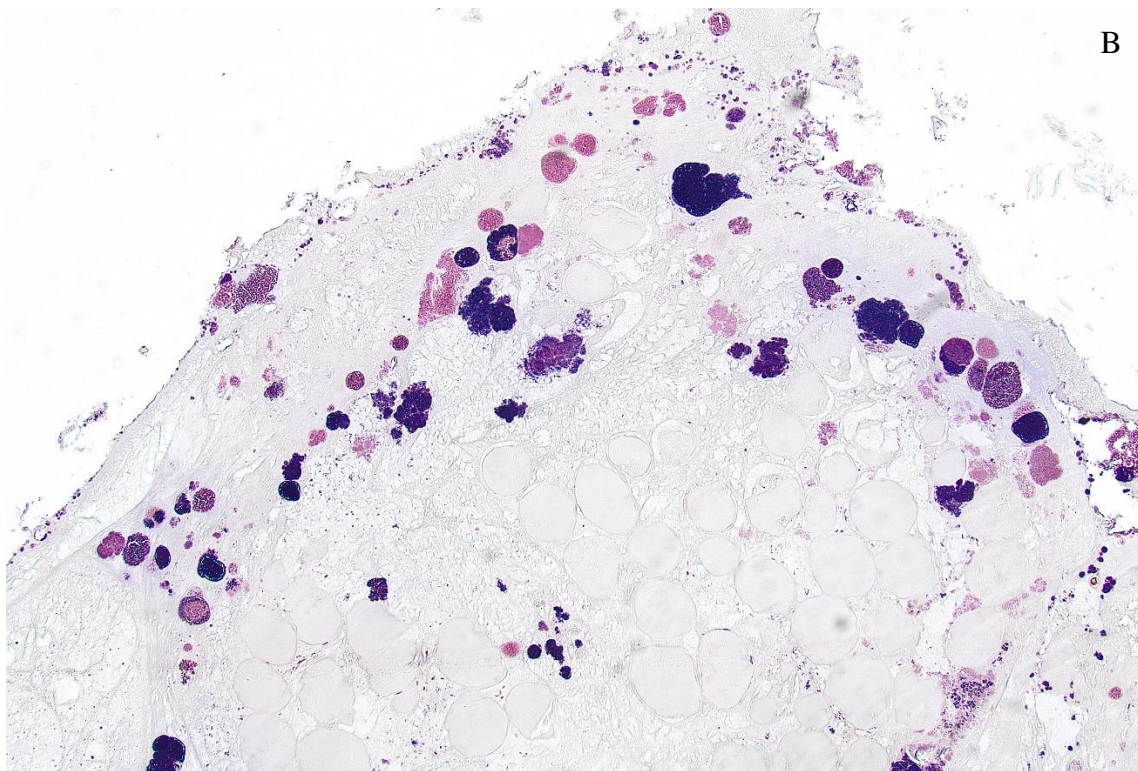
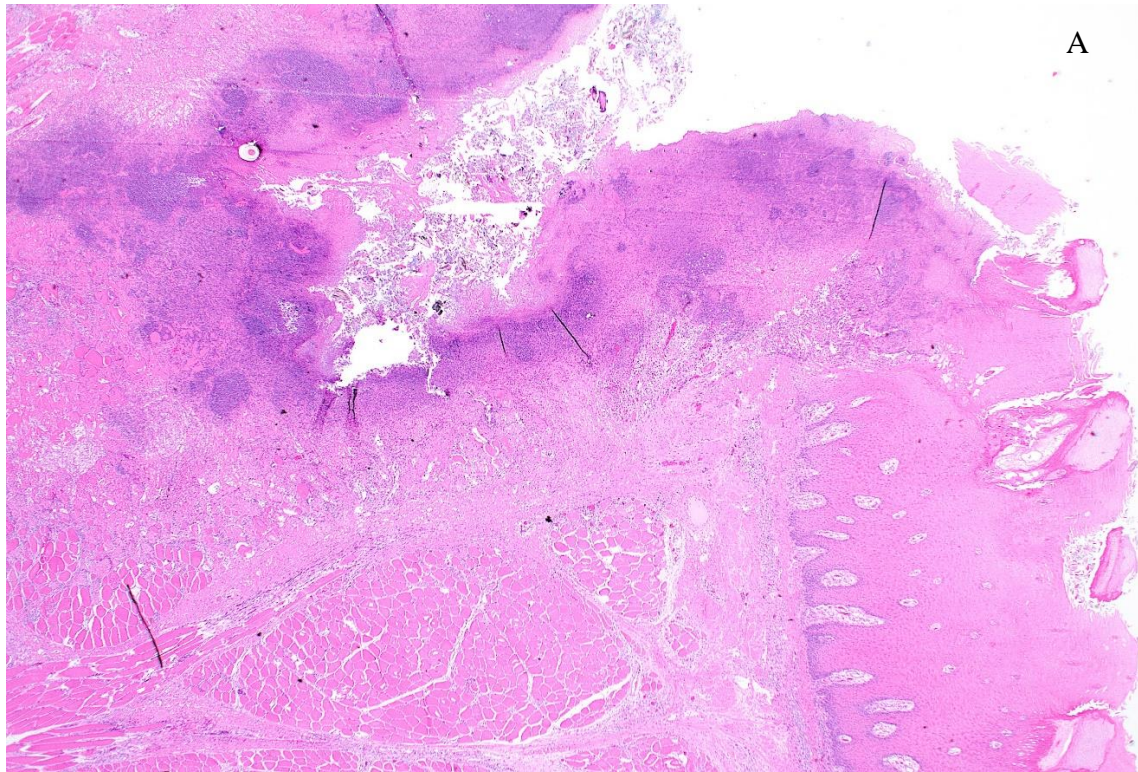


Figure S3 A and B Multifocal areas of hemorrhage on gross examination of a more acutely affected tongue.



Figure S4 A Wedge-shaped lesion of acute hemorrhage in a more acutely affected tongue (HE).
B Fragmentation of skeletal muscle fibres (arrows) with hemorrhage (*) in the more acute tongue lesions (HE).

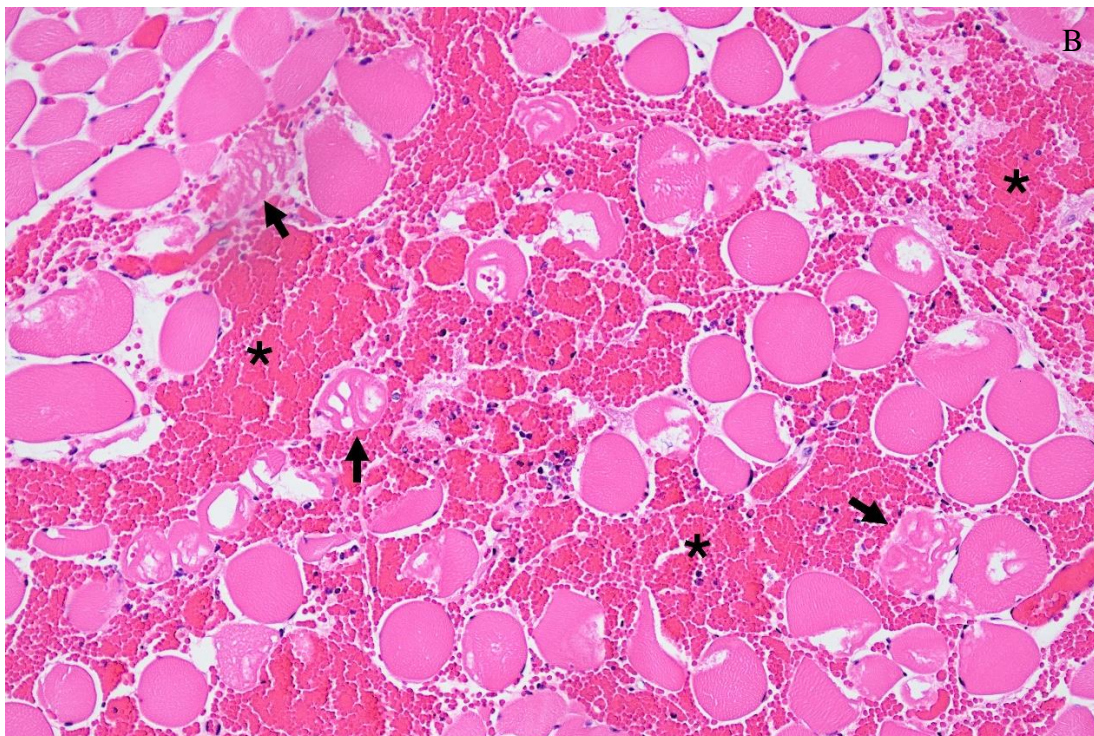
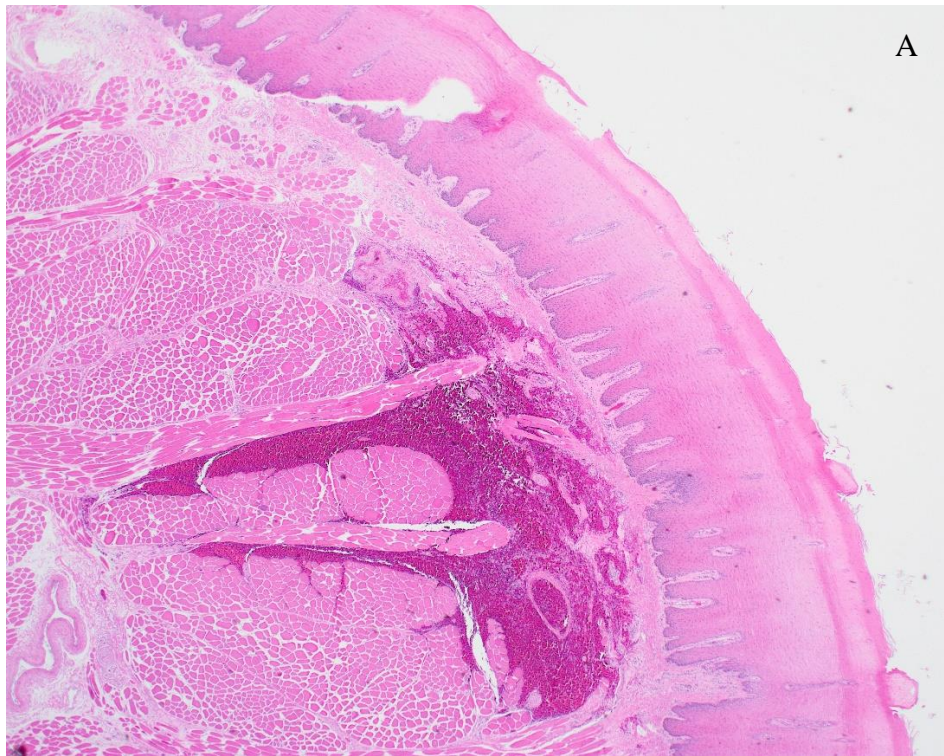


Figure S5 A-F. Hard clumps found in the DDGS and a sample of DDGS, submitted for mycotoxin analysis. A – hard clumps with green mold inside. B – Hard clumps with black/white mold inside. C – Wet lumps, no mold visible. D – Wet DDGS from around the base of the pile. E – Crust from surface rain/watering with white mold. F – normal looking DDGS from the pile.



Table S1 Concentration of ergot alkaloid mycotoxins, Type A trichothecene mycotoxins and Type B trichothecene mycotoxins found in samples of differing consistency in the DDGS feedstuffs

Sample	Description	Total ergot alkaloid concentration (ppm) ^a	Type A trichothecenes concentration (ppm) ^b	Type B trichothecenes concentration (ppm) ^c
1	Hard clumps with green mold inside (Figure S5A)	3	0.1	0.6
2	Hard clumps with black/white mold inside (Figure S5B)	12.2	0.1	0.4
3	Wet lumps no visible mold (Figure S5C)	7.5	0.1	0.4
4	Wet DDGS from around base of the pile. No mold visible (Figure S5D)	5	0.1	0.6
5	Crust from surface from rain/watering (Figure S5E)	2.3	0.1	0.5
6	Normal looking DDGS from the pile (Figure S5F)	2.2	0.1	0.5

ppm - parts per million.

^aTotal ergot alkaloid concentration determined by summation of concentrations of ergotamine, ergosine, ergocryptine, ergocristine, ergocornine, ergometrine, and their corresponding S-epimers

^bType A trichothecene mycotoxins include T-2 toxin, HT-2 toxin, and diacetoxyscirpenol

^cType B trichothecene mycotoxins include deoxynivalenol, nivalenol, and 3+15-deoxynivalenol