

NOTE**BLOAT ON DOLICHOS LABLAB****ABSTRACT**

The annual tropical legume Dolichos lablab cv. Rongai was grazed by lactating dairy cattle in pure stand in South-East Queensland during the summer of 1968. Two cases of acute bloat were recorded. These are the first documented cases of bloat from a tropical legume in Australia.

INTRODUCTION

Isolated cases of bloat on *Dolichos lablab* cv. Rongai have been reported on the north coast of New South Wales (B. R. Wilson, personal communication). "Only four or so cases could be recalled. The most serious occurred where cattle had been turned into a fresh paddock of *D. lablab* with a fair amount of crab grass after having grazed *D. lablab* in an adjoining paddock. The entire herd was affected, 15 seriously and three died. Only one other death was reported and this was on a farm where several in the herd regularly showed signs of bloat each day when grazed on a pure stand of *D. lablab* grown in a very fertile area." Enquiries in the Cooroy (P. Luck, personal communication), and Atherton (J. Gartner, personal communication) areas indicate that although *D. lablab* is widely used, no cases of bloat were recalled. One case of bloat was reported in the West Moreton area in which one animal died (T. Thomas, personal communication).

ACCOUNT OF CASE

On 27th March, 1968, a case of acute bloat — Ruminal Tympany — (Blood and Henderson, 1960) was observed in one of 10 lactating dairy animals grazing a pure stand of *Dolichos lablab*. The animal (2nd lactation Jersey) had just been milked (A.M.) when first observed staggering awkwardly in acute distress. Treatment was given as follows —

1. The animal was secured.
2. A stomach tube was administered but was continually blocked and did not relieve the abdominal distension.
3. One half gallon of paraffin oil was administered with a drenching gun. This was ineffective, and the pressure increased.
4. A three-inch 14-gauge needle was inserted into the rumen through the left paralumbar fossa. A considerable amount of gas was emitted over a ten-minute period, and the respiratory distress subsided markedly. Then 20ml. of Bloat-guard* was injected through this same needle directly into the rumen. When the animal was no longer distressed by the bloat, the needle was removed. As the needle was withdrawn, 1.5×10^6 I.U. procaine penicillin were deposited intraperitoneally and a similar amount subcutaneously to prevent localized infection. The animal recovered sufficiently to return to the paddock in a couple of hours. It was several days however, before complete subsidence occurred.

Milk production decreased from two gallons FCM/day to nil and then increased to 1.6 gallons FCM/day two weeks after the incident. The animal remained on the *D. lablab* experiment, but no further bloating was observed.

On 2nd April, 1968, one other animal in the experiment was observed in distress prior to morning milking. After administration of 2oz. Bloatguard the animal recovered and suffered no reduction in milk production.

* A non-ionic surfactant: polyoxypropylene polyoxyethylene block polymer No. 18667. Smith, Kline and French Laboratories, Philadelphia, Penn., U.S.A.

DESCRIPTION OF AREA

The experimental area was located on an alluvial flat adjacent to the South Pine River on the C.S.I.R.O. Samford Research Station in South-East Queensland. *D. lablab* was sown in a drill at 30lb./acre on 16th October, 1967, and was fertilized with 100lb./acre of a mixture (three superphosphate: one muriate of potash). Growth of the *D. lablab* was delayed by dry weather and the first grazing period began on 4/1/1968. The cows that bloated were strip grazed at a sufficiently lenient grazing pressure to allow selection by the animal, so that only leaf and petiole need be grazed. No bloat was observed during this 29-day period. Following a two-week period on a paspalum, *Paspalum dilatatum*, couch grass, *Digitaria didactyla*, pasture, at one grazing pressure, the animals on 7th March began a second period of strip grazing the regrowth on the same area, which was mainly young leafy material produced from auxiliary buds on stems of the first growth.

CONCLUSION

Farmers should be made aware of the potential for bloat in cattle grazing *D. lablab*. As is common with clover and lucerne pastures, it is often difficult to predict when bloat will occur. It appears that young growth or regrowth may be associated with risk of bloat. If *D. lablab* is more widely used, it would be wise to take precautions, such as, not turning hungry animals on to pasture, delaying grazing of regrowth, spraying, etc., (Clague, 1965).

Further work is now being planned to study the conditions that may predispose animals to bloat on *D. lablab*.

REFERENCES

- BLOOD, D. G. and HENDERSON, J. A. (1960) — "Veterinary Medicine" 1st Ed. Bailliere, Tindall & Cox (London).
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