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HYDROCYANIC ACID (HCN) POISONING

Poison Rush Causes Heavy Sheep Mortality

WHEN newly developed country is to be stocked with sheep or cattle it is important to make sure that it is free of poison plants. A large proportion of the native poison plants belong to the genera Oxylobium and Gastrolobium, typical examples being Box and York Road poisons, but the cyanogenetic plants form an important group.

Cyanogenetic plants contain a chemical substance which is broken down in the rumen or paunch by enzymes either contained in the plant itself or in other plants eaten at the same time, resulting in the liberation of hydrocyanic or prussic acid, which is highly poisonous.

The HCN content of these plants varies according to climate and weather conditions, but is usually much greater in young shoots than in mature leaves which may be harmless. Consequently, there is a greater risk of poisoning when plants are making active growth after rain which has been preceded by a dry spell.

Hungry stock are most frequently affected, and symptoms usually occur within an hour or two of eating the plant, but this may sometimes be delayed until after watering. They consist of trembling, a slightly staggering gait, and laboured respiration, followed by collapse, frothing at the mouth, and death, sometimes within the space of a few minutes.

ANTIDOTE

As an antidote for HCN poisoning, drenching with a solution prepared by dissolving 2 oz. of sodium hyposulphide (the "hypo" used by photographers) in a pint of water is recommended. In the case of cattle, the whole of this solution is administered, and the treatment is repeated at half-hourly intervals. For sheep, the dosage is four fluid ounces (a fifth of a pint) repeated at similar intervals.

The risks associated with the grazing of sorghum, sudan grass, and allied species is well known, but there are several native plants which may be equally dangerous.

These include mat balsam (Euphorbia Drummondi), goosefoot (Chenopodium spp.), clover-leaved poison (Goodia latifolia), native trefoil (Lotus Australis), native fuschia (Eremophila maculata), and poison rush (Schoenus spp.).

A mortality involving the loss of more than 200 sheep in a flock of 800 within 24 hours of their transfer to a newly developed area was recently reported from Carnamah. The paddock consisted of undulating sand plain country with moist depressions, one of which contained a dense stand of poison rush which had been heavily grazed. Sheep had been running in this paddock three to four months previously without suffering ill effects.

Poison rush occurs in the Northern Agricultural areas between Dangarragan and Mullewa, and it is important that it should be recognised by stock owners.

A description of the plant will be given in the next issue of this Journal.
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