

Spotlight on Agriculture

Ministry of Agriculture, Water and Rural Development • Directorate of Agricultural Research and Training • Private Bag 13184 • Windhoek

No 62

December 2002

Trachyandra laxa (Rolbos) A poisonous plant of Namibia

POISONOUS PLANTS

Poisonous plants are an omnipresent component of the veld, which can increase or decrease from time to time. This depends **firstly** on the amount of rain. In good rainfall years poisonous plants generally decrease. If a veld area has dense stands of grass due to good rains, the growth of poisonous plants is strongly suppressed. If dense grass stands are absent, poisonous plants can disperse freely, as they have more light available for growth. **Secondly**, they often have large growth reserves that they store in their root systems, thereby also being able to grow without rain. If enough grass is available for animals to feed on, the animals themselves avoid poisonous plants. If no grass is available, animals are forced to eat these poisonous plants, feeding on them excessively and thus poisoning themselves.

Poisonous plants generally do not pose any problems in a stable plant community that is in a state of natural balance. Plant poisonings usually occur in areas where there has been some disturbance or destruction of the veld, i.e. either through drought or overgrazing.

Poisonous plant problems or plant poisonings are therefore primarily a result of poor conservation of the natural plant coverage on farms. This emphasises the importance of applying correct grazing or veld management practices.

One poisonous plant species that takes a heavy toll on livestock in Namibia is *Trachyandra laxa*. According to Dr S. Miller, Directorate of Veterinary Services (MAWRD), 600 sheep (and several cattle) died in October 2001 and 100 sheep in November 2001 due to *rolbos* poisoning in the Mariental district. The above average but late rains of the preceding season seem to have favoured the spread of toxic plants via early sprouting, while old grasses were still dry and unpalatable.

Trachyandra laxa (N. E. Br.) Oberm.

Common Name: *Rolbos* (Afrikaans)

Distribution: The map indicates Namibian records of this species as retrieved from the specimen database at the National Botanical Research Institute. As geophytes are generally undercollected, this map presents only an indication of the distribution of this species.



Trachyandra laxa inflorescence

Trachyandra laxa (Rolbos) A poisonous plant of Namibia

Description: A perennial plant with underground rhizomes (geophyte). Plant is up to 0.6 m high, dainty, slender, with an often rather thick peduncle. The leaves are soft, succulent and are arranged in a basal rosette, and are up to 400 mm long, 1 – 3 mm in diameter, round in cross section, often sticky. The large, branched inflorescences bear small, white flowers, which have brown stripes. This species is often referred to as a “tumble weed”.

General information: The plants are palatable early in the growing season and occur extensively in overgrazed areas during the dry months (August to December). The spreading of this plant ceases shortly after the onset of good rains and improved pastures.



Trachyandra laxa in habitat.

Trachyandra POISONING IN LIVESTOCK

Clinical signs: During the early stages animals:

- ❖ move with difficulty.
- ❖ knuckle over at the fetlock joints.
- ❖ (at times some animals may reveal overknuckling and overflexing of the hock and carpal joints, and occasionally also spasticity of the hind legs).
- ❖ show various degrees of hypersensitivity.
- ❖ tremor or muscle twitching.

Progressive paresis (partial paralysis) and paralysis usually follow and animals go down in sternal recumbancy (reclining). Affected animals die of starvation, exposure or secondary complications one to three months after the onset of symptoms.

Treatment: With proper feeding or improved grazing, complete recovery from the early stages may occur after six months. In some cases though, partial recovery occurs but the animals retain a limb that is still affected by paralysis.

INFORMATION COLLECTING ON POISONOUS PLANTS

As poisonous plants in general cause high stock losses each year, which can run into losses of thousands of Namibian Dollars, it is very important to receive and collate information on poisonous plants and their distribution. The NBRI is working in collaboration with the Directorate of Veterinary Services to acquire such information in order to be able to supply more detailed distribution maps and other information required by individual members of the public, farmers, veterinary surgeons and extension workers.



We urge all interested and affected persons to join our efforts and supply us with as many poisonous plant samples as possible. These samples should include your name (the collector); where the plant was found (preferably Global Positioning System – GPS – co-ordinates); when it was found; and if possible, mortality rates and what effects it had on animals. This information will help us provide you with more accurate details, maps and information of poisonous plants found in Namibia.

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