

Virbac

NUTRITION FOR ANIMAL USE ONLY

Browse Plus®

Reg. No. V11013 (Act 36/1947)

CLASS: DIGESTIVE MODIFIER

■ **STORAGE INSTRUCTIONS**
Store below 30°C in a dry place.

■ **COMPOSITION:**

Each kg contains:

Polyethylene Glycol	930 g
Excipients	70 g

(Polyvinylpyrrolidone/Calcium Hydroxide/Dry powdered molasses stillate)

BROWSE PLUS is a specialised formula designed as a drinking water / infeed additive, which enhances the animal digestive processes and results in more efficient nutrient utilization. It is particularly useful under dry conditions, or when grazing is poor. It is normally during these drier times that the condition of the livestock deteriorates even though there is still a substantial amount of nutrients available in the surroundings. Most of the nutrients is in the form of browse and less palatable grasses.

In dry conditions when grazing is limited and the food resources become depleted, the livestock are faced with a number of problems. In dry conditions animals are forced to supplement their food by browsing. When leaves are ingested, certain chemicals within the leaves affect the digestive process, causing the following problems:

(a) TANNINS

Condensed tannins combine with proteins in the digestive tract to form a condensed tannin/protein complex. This complex deprives the animal of valuable protein, which is lost as it is not digested and passes out with the tannin in the dung. The formation of tannins / resins are plant' natural defense mechanisms, and production of these may be increased in response to browsing by animals.

(b) HYDROLYSABLE TANNINS

These are small molecules which are able to pass from the intestine into the blood.

They are carried to the liver where they block the action of the detoxifying enzymes.

The metabolites of these hydrolysable tannins are potentially toxic and may even cause death.

(c) TERPENES

The most important terpenes are the oleoresins and resins.

When ingested these resins interfere with the action of the proteolytic enzymes responsible for normal protein digestion. Even if tannins were not a factor, the animal would still be affected because of the action of resin.

(d) DIGESTIVE MALFUNCTION

As a result of the interaction of the tannins, hydrolysable tannins and terpenes, as well as other chemicals released by the plant tissue, the digestive process is slowed down, the animal loses its appetite and becomes lethargic. The dung is very dark, dry and hard. As a result these animals often drink a large amount of water and remain close to the watering point.

ACTION OF BROWSE PLUS

- The ingredients of BROWSE PLUS break the condensed tannin/protein complex to release proteins, which are essential for the action of the micro flora in the rumen as well as for the digestion of cellulose.
- BROWSE PLUS prevents the absorption of the hydrolysable tannins.
- The structure of resin is modified, which then neutralizes their negative effect on proteolytic enzymes.
- BROWSE PLUS allows the intestine to absorb vital nutrients more efficiently.

OTHER EFFECTS OF BROWSE PLUS

- Leaf intake of normally browsed plants, will be increased considerably together with plants not normally eaten.
- Increased grazing of less palatable grasses.
- Digestion is more active.
- Dung will become softer with a green consistency.
- Game animals will also benefit especially in drought conditions.

■ **DIRECTIONS FOR USE**

Use only as directed

- 1-4 g per animal per day, depending on the vegetation being eaten.

BROWSE PLUS can be added daily to drinking water at recommended rates.

BROWSE PLUS can also be added to licks, feed and pellets.

BROWSE PLUS IS NOT A LICENCE TO OVERSTOCKING

WHAT IS IN IT FOR THE FARMER?

- BROWSE PLUS is a cost-effective treatment.
- More use of available feed resources.
- May also be used for game animals.
- All ingredients are biodegradable and environmentally friendly.
- Easy to use.
- Increase digestibility of browse and unpalatable plants materials.

Your animals cannot afford to be without BROWSE PLUS during dry conditions.

■ **PRESENTATION:**

4 kg, 10 kg and 25 kg.

Registration holder:

VIRBAC RSA (Pty) Ltd
(Reg No. 1990/003743/07)
Private Bag X115, Halfway House 1685
South Africa
Tel: (012) 657 6000

Distributor:

Livestock Services Cooperative Society
Stand No. 2375
Pamodzi Highway
Lusaka Showgrounds
P.O. Box 32025
Lusaka

Manufacturing facility:

VIRBAC RSA (Pty) Ltd
(Reg. No. 1990/003743/07)
Private Bag X115
Halfway House
1685
South Africa
Tel: +27 12 657 6000

Namibia Reg. No. N-FF 0482
Zambia MA No: 359/710V GS