

Well fed sheep and goats produce

- More milk
- More meat
- More kids and lambs in a lifespan.



Well managed flock



Kenya Agricultural Research Institute

P.O. Box 5781 | 00200, NAIROBI.
Tel: 254-20-4183301-20, Fax: 254-20-4183344
Email: resource.centre@kari.org
Website: www.kari.org

Compiled by:

Mbuku S.M., Kitilit J.K. and Muhuyi W.B

For more information contact:

Centre Director,
KARI- Lanet
P.O. BOX 3840, 20100 Nakuru
Tel: 254 51 851217
Email: karilinet@africanonline.com

KARI information brochure series / 56 /2008

Ksh. 20

How to supplement sheep and goats using local dry land tree legumes



Introduction

Sheep and goats in the dry areas of Kenya are mainly fed on natural pastures which are low in protein and energy. Subsequently, low fertility, slow growth rates and low milk production are common. There is therefore need to supplement with protein sources some of which are indigenous legumes such as *Acacia* and *Balanites*.

These two are:

- Highly palatable to sheep and goats
- Have high protein and energy levels and are easily digestible.

The edible parts of *Acacia* include the bark, leaves and fruits while those of *Balanites* include the branch tips, leaves and the fruits.

Composition of edible parts of *Acacia*, *Balanites* and hay

Forage	Dry matter	Crude protein	Calcium	Phosphorus
Acacia	65	11	2.8	0.006
Balanites	66	15	1.7	0.013
Hay	84	7	0.0	0.0

Advantages of feeding sheep and goats with legumes

- *Acacia* and *Balanites* trees are tolerant to drought and readily available year round.
- Dried legumes can be stored and used during the dry season.
- They provide protein, carbohydrates, minerals and essential vitamins for fertility and growth.



Healthy sheep

How to prepare a legume supplement

- Collect bark, branch tips, shoots, leaves and the fruits and dry in the sun.
- Cut into small pieces and grind using a hammer or mallet.
- Sieve the contents to remove indigestible materials.
- Put surplus feed material in aerated gunny bags for storage.

Feeding the sheep and goats

- Graze the sheep and goats during the day on natural pastures in the traditional way.



Goats grazing on natural pastures during the day

- Bring the animals from the field and house them in a night *boma* or kraal.
- Give adults 140g and young stock 70g per day of *Acacia* and *Balanites* supplements using a basin or feeding trough.



Feeding *Acacia* and *Balanites*