PLANTING OF CULTIVATED PASTURES

Cultivated pastures play an important role in livestock production by providing roughage throughout the year. Reasons for using cultivated pastures can be to relieve the pressure on the veld, reduce the quantity of conserved feed, improve the fodder flow, the carrying capacity of the farm and the performance of individual animals.

Factors to be considered in the choice of a pasture species are temperature, rainfall, soil type, perennial or annual grasses and the production cycle.

The farmer must choose grasses which are suited to his own conditions and those that he or she would consider easy to handle in terms of utilization for grazing, hay or foggage.

The article comes from North West Focus. Vol.2 1999.

TICK-BORNE DISEASES IN RUMINANTS

Tick-borne diseases can cause heavy losses of animals and can prevent the introduction of high-producing animals to upgrade or replace local stock. Tick-borne diseases are diseases which are spread between animals by the bite of an infected tick. A single infected tick can pass disease on to an animal. Some of the important tick-borne diseases are heartwater in cattle, goats and sheep; redwater in cattle and gallsickness also in cattle.

There are numerous ways to prevent or control tick-borne diseases, such as tick control by dipping or spraying.

The article comes from a pamphlet compiled by Dr Jenny Turton of the Agricultural Research Council.
PORTABLE SPRAYING PESTICIDE APPLICATORS

The small tropical farmer is faced with a broad range of pests, diseases and weeds. A portable spraying system is one of the most valuable weapons a farmer can have in his fight against pests. Selection of the right portable pesticide applicators will go a long way to satisfy the combined priority of pest, disease and weed control with operator safety. Farmers should ask themselves a few questions about the particular pest control situations than confront them. Some of these questions are: what is the range of crops grown; Will I use the same sprayer for the applications of herbicides as well as insecticides and fungicides; Does the height and/or density of the foliage present a problem; Is the volume of water used for spraying a limiting factor; and am I worried about safety?

The article comes from *African Farming and Food Processing*, March/April 1999.

COTTON FARMING

Preparing the seedbed
Cotton seedlings are very tender and are often killed during emergence. To accelerate germination and emergence of seedlings a seedbed of fine tilth is required. The soil should be as level as possible before planting, because if the land is uneven or the slope too great, the plants will not get enough water across the length of the beds and furrows. The implementation of an efficient weed control program starts already with the preparation of the seedbed and is a prerequisite for high yield of cotton fibre in the end.

Cotton planting methods
Various mechanical planters are available for cotton planting. The correct choice of planter plates is important to assure dense planting of seed. Although cotton has the capacity to adjust the amount of bolls according to growth conditions and plant density, there still exists an optimum plant population for dryland irrigated seed cotton. Target plant populations of +70
000 plant/ha under irrigation and 30 000 plants/ha must be considered. The advantage of cotton in wide rows under dryland conditions lies in the simplification of the weed control process. Again, effective weed control is a pre-requisite.

The article comes from *Nufarmer and African Entrepreneur*. 1999. 4(4).

**REPRODUCTION IN LIVESTOCK**

A feature of successful livestock production systems is that animals reproduce regularly. The reproductive process is influenced mainly by the way in which animals are managed and fed. The challenge facing livestock producers, and especially those involved in producing animals on mainly roughage diets, is to achieve good reproductive rates at the lowest possible cost. In order to achieve this goal, knowledge of the reproductive process, and the factors which influence reproductive ability, is useful. The reproductive process starts with conception and ends with the birth of offspring. The number of males required to mate females depends on the farming system used. More males are required when a restricted breeding season is used. The ability of female stock to conceive depends on their health, their body condition or weight at mating. Farmers should thus aim to manage their animals so that target weights and conditions are met. It is also possible to improve reproductive rates by manipulating the amount of milk produced by females, or the suckling activity of their offspring.

The article comes from *Agri Update*. 1999(1)

**THE CULTIVATION OF PECAN NUTS**

An important economic aspect of the production of pecan nuts is that the trees only start bearing from about the fifth to seventh year after planting. At this stage a tree can yield about 1 to 2-kg nuts. Thereafter the yield increases annually and the full bearing stage is usually reached during the tenth
to fifteenth year when an average yield of 1000 to 2000kg/ha can be expected from well-tended trees. In establishing the orchard soil and climatic requirements have to be met. Pecan trees are usually not self-pollinating, therefore compatible cultivars must be planted together. Small quantities of phosphate and potassium are needed when pecan trees are mature (10 years and older) but considerable quantities of nitrogen are needed. Because of the fact that the majority of the feeding roots (80%) are just under the soil surface in the drip area of the tree, the drip area must be kept clean from weeds.

The article comes from North West Focus. 1999(2).

SHORT COURSES IN THE FACULTY OF AGRICULTURE, UNIVERSITY OF THE ORANGE FREE STATE

Please note: The course fees are payable to the University of the Orange Free State at registration. A deposit of 20% of the course fees (which will not be refunded) must accompany the application form. Lunch and teas will be served on campus during the course and are included in the course fees. Accommodation must be arranged by yourself.

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FINANCIAL MANAGEMENT IN AGRICULTURE

Presenter: Dr W T Nell (Centre for Agricultural Management, UOFS)
Duration of course: three days
Cost of course: R450 per day + R500 for spreadsheet programme to use in financial planning
Date of course: 6-8 April and 4-6 October 2000
Closing date for registration: 17 March and 18 September 2000

PRINCIPLES OF SUSTAINABLE INTEGRATED PEST MANAGEMENT

Presenters: Prof W.J. Swart (Dept. of Plant pathology), Prof Z A Pretorius (Dept. of Plant pathology), Prof S Louw (Dept of Zoology and Entomology) and Prof J C Pretorius (Dept. of Agronomy)
Duration of course: two days
Cost of course: R1 000
Date of course: 13-14 June 2000
Closing date for registration: 1 May 2000

ARTIFICIAL INSEMINATION (AI) IN CATTLE

Presenters: Prof Johan Greyling and Dr. Luis Schwalbach (Dept. of Animal Science, UOFS)
Duration of course: three days
Cost of course: R450 per person
Date of course: 26-28 June 2000
Closing date for registration: 9 June 2000
AN OVERVIEW OF CLIMATE CROP REQUIREMENTS

Presenters: Prof. S. Walker, Dr. H Fouché and Dr. E Mukhala
(Dept. of Agrometeorology, UOFS)
Duration of course: one day
Cost of course: R250
Date of course: 27 June 2000
Closing date for registration: 12 June 2000

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