

Small acreage pastures are useful for does and yearlings. In using such pasture, overgrazing should be avoided. A good management practice is to divide the pasture into smaller lots and rotate the animals every 10 to 14 days. In addition to preventing overgrazing, such rotation helps to break up the life cycle of internal parasites which can create health problems.

Hay

A good-quality legume hay or a mixed legume and grass hay is an excellent source of digestible nutrients. Such hay is rich in protein, minerals, vitamins and usually contains excellent quality effective fiber. Hay that has a good green color, pleasant aroma, is leafy, and has small and tender stems is usually very palatable to dairy goats. Palatability of coarse stemmy hay can be improved by crushing. The stage at which hay is cut has a direct influence on its feeding value. As the grass

Table 8c. Sample grain mixtures for lactating goats*

Ingredients	Levels of Protein in Grain Mix			
	12%	14%	16%	18%
Cottonseed hulls	—	300	—	—
Cracked corn	680	715	870	620
Rolled oats or barley	450	—	500	400
Soybean hulls	—	300	200	200
Wheat midds	200	—	—	—
Soybean meal (44)	180	200	380	380
Molasses	155	140	—	—
Citrus pulp	300	—	—	—
Corn gluten feed	—	300	—	350
Def. phosphate	10	12	15	10
Calcium carbonate	10	18	20	25
Salt, trace	15	15	15	15
	2000	2000	2000	2000

* Roughage component must come from hay, silage, etc. Higher level protein needed with silage and lower level needed with legume hay.

or legume matures, there is a steady decrease in crude protein and energy content along with an increase in crude fiber content.

Grass hay is frequently used as the source of roughage for dairy goats in Florida. The quality of grass hay varies considerably depending on stage of maturity. Grass hays require supplementation with concentrate and should be used in smaller amounts than legume hay.

The following kinds of hays are commonly fed to dairy goats in Florida: alfalfa, perennial peanut, soybean hay, alyce clover, mixed grass and legume hay, and grass hay such as Bermuda, Bahia and pangola.

By-Product Roughages

Weather conditions (high humidity and rainfall) during the summer months in Florida are detrimental to the making of good quality hay. As a result, good quality hay is expensive and other alternative roughage sources are in demand.

Cottonseed hulls have been a popular source of fiber in Florida feeds for several years. They are bulky, containing 43% crude fiber and about 40% TDN. The amount needed to maintain a butterfat test varies from 25 to 40%, depending on other ration feedstuffs. Dairy goat producers have found that cottonseed hulls are very palatable and add good texture to the ration. Since grass hay is the most abundant and cheapest source of hay in Florida, the addition of cottonseed hulls to grain mixtures reduces the amount of grass hay needed. Dairy goat producers have reported improved performance when adding 10 to 15% cottonseed hulls to grain mixtures and feeding less grass hay.

Coarse, scabrous peanut hulls may also be used in limited amounts during periods of short roughage supplies to extend the usage of other fiber ingredients. The recommended level varies from 5 to 15%. Peanut hulls are low in nutritional value, containing 15 to 20% TDN and 45 to 50% effective fiber. Avoid using peanut hulls that may contain pesticides.

Silages and Haylages

Silages and haylages have never been used extensively for feeding dairy goats. This is primarily due to management problems and the limitation on the amount of silage to be fed in a given day. If the herd was associated with a cattle operation, a smaller amount of silage could easily be made available to dairy goats. During warm weather, the top 3 to 4 inches of silage or haylage must be removed daily to prevent spoilage. It is recommended that silage, haylage and root crops such as turnips be fed either after milking or in amounts that will be consumed 3 to 4 hours prior to milking in order to prevent off-flavors in milk. About 2 lbs of haylage and 3 lbs of silage are needed to replace 1 lb of hay.

The Concentrates

Concentrates tend to be high in energy and low in fiber. They are that portion of the ration that provides the greatest amount of energy and protein. Protein feedstuffs vary in level of protein and are classified as medium or high. Medium protein feedstuffs commonly used are corn gluten feed, corn distillers and dried brewers grains. High protein feeds are soybean meal, peanut meal