

HAY

Definition of the hay:

It is the basic coarse material (filler) resulting from preserving green fodder by drying, where the surplus fodder is transferred from the need of agricultural animals from agricultural lands and the largest area in it is 60% to a dry matter that becomes in the range of 15-20% while the proportion of the material reaches 25-80 % It is of high nutritional value that can be stored for the provision of animals in the seasons when we lack green fodder.

Importance of hay

* In feeding ruminants: hay is one of the most important filler feeds that enter the daily diet of animals. the nutritional value of the hay varies depending on the plant from it.

* In general, hay contains a high percentage of materials and nutrients protein, sugars, mineral elements, vitamins, especially in the leaves of the plant, which contain most of the nutrients in the hay, the higher the quality becomes.

* Dried hay is a rich source of vitamins A,D and K, especially vitamins, riboflavin, thiamine, and folic acid, and mineral elements, especially calcium and phosphorous.

Methods of making hay:

hay can be manufactured in the following ways:

* **Natural drying.**

* **Dry under the lid**

* **Artificial drying.**

The success of the manufacture of hay depends on the appropriate drying time on the areas covered by natural drying. Beware of biological and chemical processes Factors.

Factors that determine the quality of the dressing:

- 1- Growth stage: The higher the stage of plant growth, the greater the amount of dry matter produced in a dunum.
- 2- The color of the hay: related to (growth stage - weather conditions drying and storage method).
- 3- Smell of hay: Good hay smells like green fodder, and bad hay smells like rotting or moldy hay.
- 4- Dependence on humidity: good hay has a humidity of 15-20%.

The quality of the hay is determined by the stage of plant growth and the color of the hay:

- 1- If the color is bright green and the plant is mowed قطع at an early stage and the weather conditions are good, the hay is good and has a desirable smell.
- 2- If the color is yellow and the plant is in full bloom and there is light rain, the hay is of medium quality and has no smell.
- 3- If the color is gray and the plant is late-stage and the weather is bad, the hay is often moldy and has a bad smell, and it is advised not to serve it to the animal.
- 4- The color is blackish-brown: this color appears if the hay is not dried, which leads to rotting and exposure to high heat during storage, and thus the hay is very bad and unfit for nutrition.

Type of feed that is made as a hay:

- 1- Alfalfa البرسيم It is grown in alfalfa cultivation areas. , and its productivity is 3-4 tons/ dunum. The percentage of protein in it is less, as the percentage of crude protein is 2.8% in the flowering stage and 10.8% in energy in green clover. and replace Alfalfa hay for the same purposes.
- 2- Soybeans فول الصويا Its length is 30-80 cm. Its varieties are divided into several groups (yellow-green - brown - black-mixture). Plant composition: Stem and branches make up 25.45% of the plant, leaves make up 40.17%, pods 34.37% there are varieties for green fodder, straw, grain, or oil. Hectare yield of green matter 30-40 tons and of soy hay 7.5-12.5 tons.

3- Grass crops محاصيل الحشائش: Most of the processed hay in the world, especially oats شوفان and barley الشعير, is grown in mixtures with leguminous crops المحاصيل البقولية to produce hay rich in both protein and energy.

4- Oats الشوفان : An annual plant of the grass crops is used as green fodder and hay for agricultural animals. Oat hay is low in protein. Its fodder value is good when it is grown as mixtures with leguminous crops as it leads to an increase in protein in the resulting hay. Early wetting in it leads to an increase in the proportion of energy and protein in it.

5- Barley الشعير : It is usually grown in areas with low fertility and low humidity. The productivity of irrigated barley is 1.2-1.4 tons/dunam. Hay can be made from all barley varieties (six-row - two-row) and early weed for hay in early April at the beginning of flowering until the milky stage when good quality hay is produced. Its monster at the beginning of flowering gives hay the richest possible in energy and protein. The production of barley + vetch is equivalent to 30% of the production of a dunum of green fodder.

6- Herbs الاعشاب :There are many types of herbs that grow naturally or are cultivated to produce green matter in animal husbandry farms, including:

1- Grasses of the Grass family عائلة الحشائش : Grass عشب - Muammar rye معمر - جودار - جودار - Sunsilah صنسيلة - Sibyla سبيلا - Wild barley بري - Wheat قمح .

All of these herbs can be made into good-quality drips as they are high in carbohydrates.

2- Herbs of the legume family: الفصيلة البقولية: wild alfalfa البرسيم البري - wild galbanum الجلبانوم البري .