Hay

DANVEER SINGH YADAV
Assistant Professor
Livestock Production Management
College of Veterinary Science & A. H. (NDVSU) MHOW

Hay: Conservation of high-quality forages with minimum loss of nutrient by drying is termed as hay making.

- The principle of hay making is to preserve nutritional value of forages through drying it to a level (less than 12-15% moisture) at which the activity of microbial decomposers is inhibted.
- In India, sunlight is available in abundance, which enables farmers to dry the green forage in open sunlight and thus making hay more economical.

- The hay making leads to reduction of moisture content to 10-15%, which inhibits the enzyme activity in the plant to be conserved.
- Various mrthods of drying includes drying on wire, roof tops, treetops, galvanized tin sheets, tripod stand, tetra pod stands, field curing.

Hay

Crops suitable for hay making

- Thin stemmed cereal crops like sorghum, oat, reage grasses, range legumes particularly sylosanthes, Siretro, cowpea, lablab, and all the cultivated legume fodders like berseem, lucerne, and cowpea are suitable for hay making.
- Leguminous forages have high buffering action and high nitrogen content, and hence are more suitable to be conveniently conserved as hay.
- Cultivated fodders like hybrid napier, para grass, guinea grass, teosinte are not suitable for hay making.

Method of Hay Making

Hay making is relatively more convenient and easy for Indian farmars.

1. Cut leguminous crops (berseem or lucerne) in thew pre-blossom stage in order to ensure conservation of protein and available energy to a great extent.
2. Chop the forage while still moist (fresh or wilted) with a chaff-cutter. Thin stemmed crops including crops including legumes can be dried without chopping while thick stemmed fodders like sorghum, maize and bajra (pearl millet) require chopping or crushing before they are allowed to dry.
3. Chopping need not be too fine. The best length of the cut is about 5 to 8 cm.

4 Spread the wet chopped forage in the sun on a smooth hard surface in a thin layer not exceeding 12 to 15 cm in height. The the usual threshing floors, roof tops, polythene sheet. Can be used for dring of forages.

5 Stir the drying forage every 2-3 hours during the day to speed up the drying process under exposure to the sun and the air.

6. When throughly dry (usually) after 2-3 days, depending on the frequency of stirring the intensity of the sun and the movement of the air, gather the mixture of dried stems and leaves to store or market.

- When hay balers become available, the chopped and dried forage can be baled.
- Baling reduce the storage space and facilitates the transport of the forage to the market.

Hay Storage

7. After it is well dried (dry-matter content at the time of storing should be around 85-90%) the forage can be stored at the farm as hay in the same way as wheat bhusa in the thatched or mud-covered stacks or in building normally used for storing wheat bhusa rice straw.

Good quality of hay

- Good quality hay should contain moisture between 12-15%, should be highly digestible, leafy, pliable, palatable, free from undesirable weeds and moulds.
- It should be free from dust, green in colour and should have minimum loss of nutrients while curing.

Hay

BALES OF HAY, KANSAS (CVG / PD)

Advantages of Hay Making

1. It is most suitable method of conservation of green fodder for small holder.
2. Less expensive to prepare a high quality conserved from of feed.
3. It is possible to maintain more stock on a certain area of land .
4. Many undesirable things present in a fresh crop are eliminated after it is converted into hay.

Disadvantages of Hay Making

1. In making hay from high-quality forage, the biggest drawback is the loss of valuable leaves in handling.
2. Some nutrients are always lost in field curing of hay.
3. Drying of green forages at ordinary temperature reduces its digestibility.
4. Loss of vitamins due to bleaching and fermentation.

Thank you