

Condensed Ration blocks for Animal Nutrition

Animal husbandry has got a key place in rural economy. Main parts of animal fodder is obtained from crop residues such as wheat/ paddy straw, sorghum stover, straw from pulse crops and grasses. The density of all above fodders is very low, therefore many problems are faced by the farmers in using, storage and transportation of these residues. At the same time nutritive value of these residues is very low. They contain 3-6% protein and 40-45 % total digestive matter. These residues contain negligible amount of mineral mixture and vitamins.

Ration blocks: Grasses, stover and paddy straw are chaffed and pulses fodder such as black gram, groundnut, stylosanthes, leaves of subabool and concentrates are mixed in the following ratio. Then the mixture is condensed in blocks by densifying machine. The weight of a block is approximately 3-4 kg.

The mixture can be prepared by mixing following constituents.

Mustard cake/ other cakes- 35 parts

Ground barley/ maize -25 parts

Wheat bran -37 parts

Mineral mixture - 2 parts

Salt - 1 part

Total 100 parts

Above said dry fodders are mixed with concentrate mixture in the ratio of 60:40 or 70:30.

Condensation increases density of fodder: Generally the density of fodder is 30-105 kg/m³, whereas density of condensed blocks become 360-450m³.

Effect of condensation on transport cost: A truck can carry 7.25 q grass or fodder but after condensation it can be loaded up to 131 q in same truck. Thus transport cost can be minimised 6 to 8 times and many difficulties can also be avoided while transport. These blocks can be sent to drought, flood affected areas and places where, fodder is not available.

Condensation reduces storage space: Non- condensed feed require more space (1.06m³), whereas condensed fodder needs lesser space (0.22-.024m³). Thus farmers does not require much space for storing the fodder.

Effect of feed blocks on animal acceptability: First of all animal feed is enriched with the elements which are not available in feed, such as concentrate, oil cakes, stylosanthes, subabool leaves. When fodder is fed as such its acceptability is 2.18 kg/ 100 kg body weight whereas the acceptability of condensed blocks is 2.69 kg/ 100 kg body weight. Thus, it can be concluded that fodder blocks are superior over fodder in terms of its acceptability.

Cost of making blocks: The cost of such blocks depend upon the constituents used in making the blocks. A block of 3-3.5 kg costs Rs. 15-17.50 (@Rs. 5/ kg).

For detail information please contact to:-

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