

Beet root: An anti-anaemic agent

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Anaemia is a common disorder among various species of animals and human, defined as a decreased concentration of blood haemoglobin or erythrocytes. Iron is an important element that makes up the haeme molecules of haemoglobin in erythrocytes allowing for oxygen transport and utilization. As per the scenario in Indian conditions it is a dreadful pathological condition especially for livestock farmers. Several pharmaceutical in Indian market have their haematinics but the main problem arises for small and middle livestock farmers in with their economical conditions.

Beet root (*Beta vulgaris*) gives the best alternative in Indian conditions and the most interesting fact is it's economicity with farmers as compared to commercial haematinics. It is a main source of iron, Nitrate, Sodium, Potassium and Betalin as part from its beneficial effect to treat anaemia. Other includes as lowering the blood pressure by dilating the blood vessels, relaxing smooth muscles, increasing oxygen carrying capacity, increasing folic acid, reducing kidney stones and improving rheumatoid arthritis condition. It is being used as traditional medication for curing lots of diseases by different local communities. The most common phytochemical ingredient in beet root is Betaine and Betalin. This is most potent to

naturally detox the body and its multi-organ tumour suppressing action. Beet pulp is the residue left from ground sugar beet after sugar extraction. It may be used as energy source for ruminants. It contains average 76% of its dry weight as carbohydrates in form of homo and hetero-polymer. The unique chemical structure of beet pulp as a fibrous high energy feed stuff is administered to substitute grain for feeding ruminants. Dried beet pulp, a carbohydrate rich by product of sugar industry has been a partial source of energy in ration of livestock and could be compared with cereal grains at two levels in ration of ruminants. This can be feed in dairy ration without undesirable side effects.



Chemical Composition:-

Dry matter	89.5%	Lignin	2.83%
Crude Protein (CP)	10.7%	Sucrose	2.99%
Crude Fibre (CF)	21.54%	Calcium (Ca)	0.77%
Eather Extract (EE)	0.64%	Phosphorus (P)	0.09%
Carotene (mg/kg DM)	0.21	Magnesium (Mg)	0.30%
Ash	3.25%	Iron (Fe)	0.03%
Nitrozen Free Extract (NFE)	63.86%	Gross Energy (GE)	4164 kcal/kg DM