



Sal DOC contains 10-12 per cent protein and about 50 per cent starch and can be used as cattle and poultry feed. Starch could be isolated from Sal Meal and used in various industries. Sal meal also contains 14% tannin consequently not more than 3% for chicks and 10% for laying hens and cattle is used in compound feeds. The detanning of Sal meal will provide tannins for leather industry which are presently imported as well as deoiled sal meal can be incorporated in cattle and poultry feed in large proportions.

The Sal seed has about 12%-14% oil which is extracted. the protein content are low in Sal seed extraction at 9%-10%, but it has good levels of lysine and imthionine in its essential amino acid profile. Sal seed extraction contains 6%-10% trannin and it is grouped amongst starchy feed, as its carbohydrate content is about 70% that contributes to the feed energy.

The Sal seed extraction can be beneficially used to decrease the ruminal degradation of other proteins is the compound feed in order to increase their biological value for ruminants and is preferred for use in cow feed.

The extraction is low cost material and is abundantly available. it is generally used as livestock feed ingredient for dairy cattle and poultry in India and foreign countries to prepare formulated feed.

#### **A. NORMAL SPECIFICATIONS**

1. Oil & Albumin ( O +A ) : 9.0% - 10.0% min
2. Sand/ Sillica : 2.0% - 2.5% max.
3. Fiber : 5.0% min.
4. Castor : nil
5. Moisture : 10.0% - 11.0% max.
6. Ash : 4.5% max.
- 7.- Carbonhidrats : 60.0% - 70.0% max.

**B. NUTRIENTS**

- 1. Dry Matter : 90.0%
- 2. Total Crude Protein CP : 9.0% - 10.0% min.
- 3. Digestible Crude Protein DCP : -----
- 4. Total Digestible Nutrient TDN : 41.0%

**C. ESSENTIAL AMINO ACIDS**

- a) Lys : 0.42%
- b) Met : 0.11%
- c) Cyst : 0.1%
- d) Thr : 0.32%
- e) Tryip : -----

- 1. Ca : 0.1%
- 2. p : 0.2%

**D. METABOLISABLE ENERGY**

- 1. cattle : 1483 k/cal
- 2. poultry : 1808 k/cal

**E. CALLARIFIC VALUE**

3000 to 3500 k/cal