



Small Scale Livestock Promotion Program SSLPP Notes



Nutritional values for some representative livestock feedstuffs in Malawi

Feedstuff	DM ¹	CP ²	DE ³
Cassava (dried, "chipped")	87-90	2.5-3	14-17
Cotton seed (whole)	93	16-23	14
Cotton seed cake ⁴	90-92	35-40	12
Fish meal/dried fish	90-92	60-70	14-16
Groundnut cake	90-93	45-55	12-14
Groundnut haulms	94	8	10
Maize bran/husks (gaga, madeya)	88-90	9-10	2-4
Maize meal (mgaiwa)	88-90	8-12	10-15
Maize stover	90	10	1.8-2
Rice (whole or cracked)	88-90	9-12	15
Rice bran (ie not hulls)	88-91	13-17	12-15
Rice hulls	92	3	2-4
Rice straw	88-90	4-8	1.8-2
Sorghum seed (whole)	90	9-12	14-16
Soybean (whole, heated) ⁵	88-90	40-50	14-18
Soybean meal	90	45	12-14
Sunflower meal	90-93	35-45	9-12
Dry pasture grass: Wet season	Low 15%+	11	
Dry season		2	
"Improved" pasture grasses including Napier	Low 15%+	12-14	

1 DM=Dry Matter expressed as a percentage

2 CP=Crude Protein expressed as a percentage of dry matter

3 DE=Digestible energy (indicative only - usually for pigs) expressed in MJ/kg DM (1 kcal/gm = 4.19 MJ/kg)

The three classes of nutrients typically have the following **gross energy** contents:

Carbohydrates - 4.15 kcal/g

Fats - 9.40 kcal/g

Proteins - 5.65 kcal/g

4 After treatment with a solution of ferrous sulphate to inactivate the gossypol (which causes brown discoloration of egg yolks), cottonseed meal can be incorporated at up to 300 g/kg in layer diets and at higher levels in diets for broiler chicks.

5 Soybean fed to non-ruminants should be heat treated by boiling or baking to inactivate mimosine.