Local Feed Library

Written by Abbas Ahmadi (abahmadi@ucdavis.edu) July 30, 2024

This handout is written for the PC version of the Ration Program for Beef Cattle for Nigeria. The software has 708 standard feeds in the standard library and 208 local feeds in the local library. You cannot delete or modify any of these feeds, but you can add new feeds to these libraries.

Add New Local Feeds

To add new feeds to the local feed library, follow these steps:

1. From the main menu select the Feed Library (LIB). The following screen appears:

Beef_NG_Eng[LIB]	×
Feed Library	
Select a Feed Libray 1. Alternate Library	
Feed Names	
[1] ACHA (white var) ^ [2] ACHA brown var (3) ACHA straw [4] AFRICAN LOCUST BEAN fruit pulp (5) AFRICAN LOCUST BEAN leaves [6] AFRICAN LOCUST BEAN leaves (7) AFRICAN LOCUST BEAN leaves [7] AFRICAN LOCUST BEAN leaves (7) AFRICAN LOCUST BEAN leaves [8] ALCHORNEA early bloom (9) ALCHORNEA leaves [9] ALCHORNEA haty (10) ALCHORNEA leaves [10] ALCHORNEA leaves (11) BAMBARA NUT hull [12] BAMBARA NUT null (12) BAMBARA NUT meal [13] BAMBARA NUT null (13) BAMBARA NUT frail [14] BANANA (whole waste) (16) BARLEY grain [15] BANANA (whole waste) (18) BERMUDA GRASS (7 weeks) [19] BERMUDA GRASS (21 weeks) (20) BURET [20] BURET (21) BLACK JACKET forage [22] BLOOD MEAL (23) BONE MEAL (ash) [23] BONE MEAL (ash) (24) BONE MEAL (raw) [25] BONE MEAL (forage) (25) BONE MEAL (forage) [27] BREWERS DRIED GRAIN (millet) (27) BREWERS DRIED GRAIN (sorghum) [28] BREWERS VEAST (dired) (23) BUTTERFLY PEA hay [31] CALAPO (forage) (21)	
Export to Excel	
Mais Manu	
Main Menu	

Feed Nutrient Analysis		
Edit Feed		
	1 Alemate Library	^
	Jorary 1. Alternate Library	
Feed Nu	Jmber 209	
International Feed Nu	umber 9-99-9999	
Feed 1	Name Nigerian local feed	
Feed	Price 0	
Feed Price	e Unit 1. \$/Metric tonne As Fed V	
Feed G	Group 01. Dry forage, roughage V	
Feed	Type 1. Roughage ~	
Maximum Volunray Intak	xe (%) 0	
Feed Dry Matte	ver (%) 90	
Digestible Energy (Mca	al/kg) 0	
Metabolizable Energy (Mca	al/kg) 0	
Net Energy for Maintenance (Mca	al/kg) 0	
Net Energy for Gain (Moa	al/kg) 0	
Total Digestible Nutrient (%	« DM) 0	
Crude Protein (%	% DM) 0	
Indepradable Intake Protein (%	« DM) 0	
Degradable Intake Protein (*	× DM) 0	
Non Destain Missen (*)	7 DM 0	
Non-Frotein Nitrogen (4	s Dim)	~
	Cancel Save	

2. Select the Alternate feed library and click the add button. The following screen appears:

- 3. Enter a name and number for the new feed. There are 208 feed in this library so the first new feed must have the feed number of 209. The feed number is more important than the feed name. Because the feed nae may change in Hausa language, but the feed number remains the same. Duplicate feed numbers are not allowed.
- 4. Assign one of the following feed groups to the new feed, but do not use feed group 13, it is reserved for the system.



5. Select the feed type. All feeds are either roughage or concentrate. Concentrates are livestock feeds that are high in total digestible nutrients and low in fiber content. Roughages are livestock feeds that contain high proportion of fiber content and is low in total digestible nutrients. Hence, concentrates provide more energy than roughages.

- 6. Enter the dry matter percent of the new feed.
- 7. Enter the nutrient analysis of the new feeds on 100 dry matter basis. There are many nutrients but four of them are very important for formulating ration
 - a. Net Energy for Maintenance (NEM) Mcal/kg
 - b. Crude Protein (CP) % DM
 - c. Calcium (CA) % DM
 - d. Phosphor (P) % DM

For the methane calculation, besides the above four nutrients, you must also enter values for the following three nutrients:

- e. Fat (EE) % DM
- f. Ash % DM
- g. NDF % DM
- 8. If you do noy have energy values for the new feed, use the Feed Tag option from the main menu to calculate Energy values using a basic feed analysis:

Beef_NG_Eng	g[TAG]				×
Feed Tag					
		Feed Name			
		Feed Group	Dry forage and roughage	elegumes	~
		Dry Matter of Feed (DM) (%)	90		
		Crude Protein (CP) (% AF)	20		
		NPN Protein Equivalent (% AF)	0		
		Fat or Oil (EE) (% AF)	2.7		
		Ash (% AF)	9.8		
		Crude Fiber (CF) (% AF)	23		
1	Enerav v	values on 100% DM Basis			
		Digestible Energy (DE) (Mcal/kg)	2.74		
	1	Metabolizable Energy (ME) (Mcal/kg)	2.25		
	Net Ener	gy for Maintenance (NEM) (Mcal/kg)	1.38		
		Net Energy for Gain (NEG) (Mcal/kg)	0.94		
	Net	Energy for Lactation (NEL) (Mcal/kg)	1.4		
	To	tal Digestible Nutrients (TDN) (% DM)	62.23		
Defaults			Help	Calculate	Main Menu

- 9. To calculate energy values on 100 DM basis you must have the following feed analysis on AS Fed basis:
 - a. Crude Protein (CP) % As Fed
 - b. Fat (EE) % As Fed
 - c. Ash % As Fed
 - d. Crude Fiber (CF) %as Fed

Export Local Feed Library to Excel

1. From the main menu select the Feed Library (LIB). The following screen appears:

Beef_NG_Eng[LIB]	×
Feed Library	
Select a Feed Libray 1 Atemate Library ~ Feed Names	
[1] ACHA (white var) [2] ACHA brown var [3] ACHA straw [4] AFRICAN LOCUST BEAN fruit pulp [5] AFRICAN LOCUST BEAN leaves [6] AFRICAN LOCUST BEAN leaves [7] AFRICAN LOCUST BEAN leaves [7] AFRICAN YAM BEAN SEED [8] ALCHORNEA early bloom [9] ALCHORNEA hay [10] ALCHORNEA hay [10] ALCHORNEA NUT hull [11] BAMBARA NUT frail [12] BAMBARA NUT frail [13] BAMBARA NUT frail [14] BANANA peel [15] BANANA (whole waste) [16] BARLEY grain [17] BERMUDA GRASS (7 weeks) [18] BERMUDA GRASS (21 weeks) [19] BURCH JACKET forage [22] BLOOD MEAL [23] BONE MEAL (stemed) [24] BONE MEAL (stemed) [25] BONE MEAL (stemed) [26] BREWERS DRIED GRAIN (millet) [27] BREWERS DRIED GRAIN (sorghum) [28] BRUETER SDRIED GRAIN (sorghum) [29] BUTTERFLY PEA hay [31] CALAPO (forage)	~
Add Edit Delete Sort	:
Export to Excel	
Ma	ain Menu

- Click the Export to Excel button. The program exports the local feed library as TauAlt_NG_Eng.xls to the following folder: C:\Program Files (x86)\UCDAVIS\GlobalFARP\xls\
- Email the Excel file as an attachment to: Francis Okechukwu Ahamefule, PhD Professor of Animal (ruminant) Production Department of Animal Production and Livestock Management College of Animal Science and Animal Prod. Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria. ahamefule.francis@mouau.edu.ng | +243 0806 852 8149 | +243 0708 579 5218
- 4. Dr. Ahamefule will check for accuracy and combine new feeds from different participant and will sent them to me to be incorporated for the next release of the software.