Android Tutorial LA Taurus Mobile

Note – Screenshots are from VN Taurus Mobile but apply to LA Taurus Mobile, as well.

Animal Information screen

- 1. From the main menu choose the LC_B, Least Cost Ration for Growing or Finishing Cattle.
- 2. Enter the animal information as shown below:

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| FILES GOTO HELP | FILES GOTO HELP |
| Beef_VN_Eng {Version 2023.01.27} [Untitled] Animal Information [LC_G] | Beef_VN_Eng {Version 2023.01.27} [Untitled] Animal Information [LC_G] |
| Title | Compensatory Growth |
| Example | No |
| Beginning Body Weight (kg) (kg) | Breed |
| 300 | Holstein |
| Ending Body Weight (kg) (kg) | Frame |
| 500 | Medium |
| Daily Gain (kg/day) | Sex |
| 0.45 | Steer |
| Overhead Cost (\$/day) (\$/day) | Age |
| 0.20 | Yearling |
| Feed Intake Adjustment (-/+) (%) | Implant |
| 0 | Yes |
| Maintenance Adjustment (-/+) (%) | Additive |
| 0 | None |
| Condition Score | Temperature |
| 5. Average | Normal |
| Compensatory Growth | Mud |
| No | None |
| | |

Note that the animal information is the same as the default one, except for the Overhead cost on Implant fields.

Feeds screen

- 1. From the Goto menu go to the Feeds screen and enter the following 12 feeds from the standard library.
- 2. To add feeds, click on the 3-dots menu at the top left corner and select the Add option.

3. Once the Add dialog box appears enter the feed number and click the Find button to find its name. Once the feed name is found click the Add button to add it to the feed list. Repeat this process to add all 12 feeds. Once all feeds ae added click the Camel button to exit the Add dialog box and return to the Feed list screen.4

Feed numbers are: 13, 30, 154, 162, 231, 267, 383, 399, 430, 563, 675, 692

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| Beef_VN_Eng {Version 2023.01.27} [Untitled] Feed List [LC_G] | Android Emulator - pixel_5api_33_1:5554 |
| Std [13] ALFALFA hay 28% Crude Fiber | 5:49 🗛 👋 🖀 🔍 🔍 🖍 |
| Std [30] ALMOND hulls 15 percent Crude Fiber | ADD CANEL |
| Std [154] BUCKWHEAT grain | Beef_VN_Eng {Version 2023.01.27} Feed List [LC_G]Get Feeds |
| Std [162] CALCIUM phosphate di | Feed Library |
| Std [231] CORN grain flaked | Std |
| Std [267] FAT animal Hydroponic | Feed Number |
| Std [383] MOLASSES cane | 13 |
| Std [399] OAT hay dough stage | Feed Name |
| Std [430] OYSTERSHELL ground | ALFALFA hay 28% Crude Fiber |
| Std [563] RICE hulls | FIND |
| Std [675] UREA 45% nitrogen | |
| Std [692] WHEAT grain Soft red winter (SRW) | |
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Ration screen

From the Goto menu go to the Ration screen and enter feeds prices as shown below. Feed prices are in local currency per metric ton as fed. Do not enter feed amounts, which will be calculated by the program during the formulation process for a list cost ration. In the evaluation mode you enter both feed amounts and feed prices, but in the formulation mode you enter only feed prices.

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| Beef_VN_Eng [LC_G] {Ver Raion [LC_G] Feed amounts are in kg as fo local currency per metric tor | sion 2023.01.2 ed. Feed prices n as fed | 27} [Untitled] are in |
| Feed Name | Amount | Price |
| Std [13] ALFALFA hay 28% Crude Fiber | 0 | 137.79 |
| Std [30] ALMOND hulls 15 percent Crude Fiber | 0 | 82.67 |
| Std [154] BUCKWHEAT grain | 0 | 110.28 |
| Std [162] CALCIUM phosphate di | 0 | 529.10 |
| Std [231] CORN grain flaked | 0 | 132.28 |
| Std [267] FAT animal Hydroponic | 0 | 264.55 |
| Std [383] MOLASSES cane | 0 | 88.18 |
| Std [399] OAT hay dough stage | 0 | 110.23 |
| Std [430] OYSTERSHELL ground | 0 | 110.23 |
| Std [563] RICE hulls | 0 | 0 |
| Std [675] UREA 45% nitrogen | 0 | 254.55 |
| Std [692] WHEAT grain Soft red winter (SRW) | 0 | 127.79 |
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Nutrient Constraints screen

From the Goto menu go to the Nutrient Constraints. Once there, click on the 3-dots menu at the top left corner and select the Recalculate Constraints option.

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| В | eef_VN_Er | ng {Versio | n 2023.01 | .27} [Unti | tled] | |
| Nutrient | Constraint | ts [LC_G] | | | | |
| InternalN ame | DisplayN ame | Pct_Unit | Pct_UsrM in | Pct_UsrM ax | Amt_Unit | Α |
| DM | Feed Dry Matter | % DM | | | kg | |
| NEM | Net Energy for | Mcal/kg | 0.983 | 0.983 | Mcal | |
| СР | Crude Protein | % DM | 11.331 | | kg | |
| CA | Calcium | % DM | 0.378 | 2.000 | kg | |
| Р | Phospho r | % DM | 0.240 | 1.000 | kg | |
| | | | | | | |

The program calculates the following nutrient constraints for the specified animal information. The most important nutrients are energy, protein, calcium, and phosphor.

- DM (Dry Matter Intake): Minimum 7.877 kg, Maximum 7.877 kg
- NEM (Net Energy for Maintenance): Minimum 0.983 Mcal/kg, Maximum 9.983 Mcal/kg
- CP (Crude Protein): Minimum 11.331 % DM, there is no maximum limit.
- CA (Calcium): Minimum 0.378 % DM, maximum 2 % DM.
- P (Phosphor): Minimum 0.340 % DM, maximum 1 % DM.

Feed Constraints screen

From the Goto menu go to the Feed Constraints.

Once there, navigate to feed number 675 Urea.

Once the Urea is selected, click on the 3-dots menu at the top left corner and select the Edit option.

Once the Edit screen appears, set a maximum of 1% DM, and click the Save button.

This constraint prevents the program from bringing too much Urea in the formulated ration.

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| SAVE CANCEL |
| Edit Food Constanists [LC 0] |
| Animal Type |
| Growing |
| Feed Name |
| Std [675] UREA 45% nitrogen |
| Minimum |
| |
| Minimum Unit |
| |
| Maximum |
| 1 |
| Maximum Type |
| 04 [%TDM] % of TOTAL ration on 100% DM |
| |

Feed Group Constraints screen

From the Goto menu go to the Feed Group Constraints.

Once there, navigate to feed group number 11 Fats and Oils.

Once the feed group 11 is selected, click on the 3-dots menu at the top left corner and select the Edit option.

Once the Edit screen appears, set a minimum of 2 % DM and a maximum of 16% DM, and click the Save button.

This constraint prevents the program from bringing too little or much fat and oil feed in the formulated ration.

Repeat the same process and set a maximum of 10% for the feed group 12 Molasses.

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| Edit Feed Group Constraints [LC_G] |
| Animal Type |
| Growing |
| Feed Group Number |
| 11 |
| Feed Group Name |
| 11. Est and sile |
| 11. Fat and oils |
| Minimum |
| 2 |
| Minimum Unit |
| 04 [%TDM] % of TOTAL ration on 100% DM |
| Maximum |
| 6 |
| Maximum Type |
| 04 [%TDM] % of TOTAL ration on 100% DM |
| |

Ratio Constraints screen

From the Goto menu go to the Ratio Constraints.

Once there, navigate to the first ration in the list.

Once the first ration is selected, click on the 3-dots menu at the top left corner and select the Edit option.

Once the Edit screen appears, confirm that the ratio of Calcium to Phosphor is set to a minimum of 1.200 DM.

Do not change anything and click Cancel to go back to the list of ratio constraints

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| | SAVE | CANCEL |
| Edit Ratio Constraint [LC_G] | | |
| Туре | | |
| 0 Nutrient | | |
| Numerator | | |
| CA Calcium | | |
| Denumerator | | |
| P Phosphor | | |
| Amount | | |
| 1.200 | | |
| Unit | | |
| 3 MIN DM minimum constrain | t, 100% | dry m |

Save ration file

Click on the Files menu and select the "Save As" option.

Save the ration data file as Eample-01



Reports

From the Goto menu go to the Reports.

Once there, select the "All" option and click the GENERATE SELECTED REPORTS button.

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| FILES GOTO I | HELP |
| Beef_VN_Eng {Version 2023.01.27} [Example-01] | |
| Reports [LC_G] | |
| Select One or More reports | |
| 01 Animal Inputs | |
| 02 Methane Emission | |
| 03 Ration Composition: Roughages and Concentrates | |
| 04 Ration Composition: All Feeds | |
| 05 Price Range and Feeds Not Used | |
| 06 Nutrient Analysis | |
| 07 Performance | |
| 08 Energy and Protein Analyses of Feeds | |
| 09 Proximate Analysis of Feeds | |
| 10 Macro Mineral Analysis of Feeds | |
| 11 Trace Mineral Analysis of Feeds | |
| 12 Vitamin Analysis of Feeds | |
| 🔽 13 All | |
| GENERATE SELECTED REPORTS | |
| | |
| | |
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Once you click the button, a warning window pops up, as shown below



Telling you that generating reports may take a long time. Because the program first calculated NRC nutrient requirements, then formulates a least cost ration using a linear programming engine, then generates reports in the Rich Text Format rtf) and finally converts generated reports to PDF format.

Click the YES button and wait. Do not click anything else. Just be patient and wait.

Eventually another window pops up telling you if the formulation was successful, as shown below:

| Info | |
|---|--|
| Success! The ration is solved and the solution is optimal and feasible. | |
| ок | |

Click the OK button. The program opens your default email program on your phone and attaches the reports to this email. Reports are in Rich Text Format (RTF). Send the email to yourself. To view the RTF attachment, you must have proper fonts and proper RTF reader app on your phone. Please see the Installation instructions for system requirements.

Open the email and double click on the attached RTF file and view it with your RTF viewer.