Nutrient Buildup Goals

Last Modified on 02/13/2024 12:01 pm CST

The standard goals supplied with the program are similar to University of Illinois recommendations. Tables may be edited in a variety of ways.

Navigate to Planning / Setup / Nutrient Buildup Goals to Add or Edit.

🖳 N	utrient E	Buildup	For Stan	dard		×
	Rec Style 05 Facto			ENF O Factor 4	R per % of O.M.	20
	ent K al Range		~	Use Equation	Years To Bui Maintenance C Stand	utback
Ra	inge To C CEC		CEC	Goal	-	i by goal
1	0	Range To To	7.5	225	This style has V Cutbacks	aried by Goal
2	7.5 10 15	To	10 15 99999	250 300 350	- Standard Maint For all Build	enance Cutback up Goals
4 5 6	0	To To	0	0	If Test Exceeds	Cut Maint. To What %
7	0	To To	0	0	400	75
9	0	To To	0	0	500	50
11	0	То То	0	0		
12	L <u> </u>		Crop Ren		Save	Cancel

- Nut Rec Style This indicates the style of Nutrient Recommendation chosen for edit or review. When adding nutrient build up information, enter the name for the style.
- ENR per % of O.M. Enter the Estimated Nitrogen Release here as a percent of the Organic Matter test result. Credit may optionally be given in recommendations for the N test result showing in the Field file.
- P2O5 and K2O Factors Multipliers used to determine how many pounds of a P2O5 and K2O fertilizer are required to raise a soil test result by one pound. On the *Standard* style, factors shown are defaulted from the University of Illinois, but different factors may be used.
- Nutrient Select the nutrient from the list to set up.
- Use Equation This allows setting up a formula to calculate the buildup of a nutrient rather than using the buildup tables provided by the program's startup information. Each nutrient may have a different formula but only one formula per nutrient within a buildup style. Equations only replace the buildup not the maintenance. The following is an example of an equation that could be used and the test performed against that equation.

PHW	PHB NO31	P1 N032	P2 OM	The buttons directly to the left represent the test result values that can be used in the equation to calculate the buildup for K in the Standard Rec Sityle. Clicking on the test	💀 Variable Values			×
ENR HYD % H	CA % K % NA	MG % CA BIP	CEC % MG SALT	Could your with the Standard Net Corper Calculation in the teal result will add to the equation. The smaller buttons below the test results represent the common mathmatical functions that are available for use in the equation. The publicown list below the buttons has the more advanced mathmatical operators that are available for use. Again, simply clicking on	PHW = PHB = P1 = P2 =		Test Equation Answer 75.07	
S MN Ext1	NA CU Ext2	ZN B Ext3	FE UD Ext4	the operator will cause it to be added to the equation.	K = NO31 = NO32 =	133	BIP = SOLSALT =	Ext1 = Ext2 =
Ext5 ()) > % YIELD	Ext6 + - \ !	Ext7 * / == >= YIELD	Ext8	Min Result 0 Max Result 150 # Decimal 2 ∽	NG32 = OM = ENR = CA = MG =		SULSALT = S = NA = ZN = FE =	 Ext2 = Ext3 = Ext4 = Ext5 = Ext6 =
	PREVIOL for calculat	IS YIELD ing K Rec.		Operators V	СЕС = НҮD = % К =		MN = CU = B =	Ext7 = Ext8 =
(199-(K-0.	00)) (100	100)-(100	0.201		% CA = % MG = % H =		UD = YIELD GOAL 1 = YIELD GOAL 2 =	
Test Equa	tion			Save Cancel	% NA =		PREVIOUS YIELD =	Cancel

Years to Build – Indicate the number of years allowed in building toward the goal for this nutrient. The
resulting value calculated for the buildup is divided by the number of years to build the nutrient.
Note: This can also be thought of as *How many applications*?

Goal Range

- Range to Check On Choose the test result to be used to range check against for the nutrient currently selected in the *Nutrient* area.
- Range Setup Set up to 12 critical ranges. The low for each level should be equal to the high of the previous level so there are no gaps. If a result falls exactly on the number set for the low and high, the lower range is used.
- **Goal** For all but the lime recs (in which case the goal represents Lbs or Tons of actual product to apply), the goal means the nutrient is being pushed to reach that test result in pounds per acre. This is also true for the resulting buildup if using the equation.

Note: The goal must be entered in pounds per acre regardless of how the test results are stored.

Maintenance Cutback

Select the style of *Maintenance Cutback* to be used. *Standard* allows for up to four levels of Maintenance Cutback if a test result exceeds the goal shown in the *Range* chart. *Varied by Goal* allows Maintenance Cutbacks to optionally be set up for each of the ranges used in the *Range* chart.

Hint: If changing the type of cutback from Varied by goal to Standard be sure to first clear out all cutbacks.

- Standard Up to four cutback levels may be defined. Indicate if there should be a cut back on maintenance if a test result exceeds the goal established on the *Range* chart.
 Note: Zero is not a valid entry for a cutback percentage. Enter .001 to get very close to zero.
- Varied by Goal When choosing this option, 12 folder tabs display. Each tab corresponds to the Ranges 1-12 found on the *Range* chart. Optionally define up to four levels of Maintenance Cutback for each of the 12

Ranges for this nutrient as shown.

• **Crop Removal** – Optionally define specific crop removal factors for each style of nutrient recommendation created. Factors entered and saved here are used rather than the standard removal factors otherwise entered at *Setup / Crop Maintenance*. To replace the current maintenance figures for any crop, delete the crop from this list and the next time the screen is displayed, the maintenance figures setup in the crop default.

	p Removal Int are Crop remov				ific to	o this	Nut F	Rec S	tvle.	lf vo	u sa	ve the	ese, t	hev	will be used	×
	alculate recs in															
	Crop Name	N	Ρ	к	s	UD	Ca	Mg	Na	Zn	Fe	Mn	Cu	в		NitrCon
1 ▶	Alfalfa		12	50												10
2	Corn	1.5	.45	.28	.12					.01			.01			
3	Hay		35	95												
4	Soybeans		.85	1.3												.6
5	Wheat-Hard	1.15	.9	.3												
6	Wheat-Soft	1.15	.9	1.2	15					2.5						
7	Wheat															
8	CornSilage															
9	Tomatoes															
10	Almonds															
11	SugarBeets															
12	Sunflower															
13	Grapes															
14	Potatoes															
15	Barley															
16	Cotton															
17	Peanuts															
18	Lettuce															
19	Broccoli															
20	Apples															