

CORN NUTRIENT UPTAKE INFORMATION

CREECH CROP SERVICES, LLC

CCS - PROGRAM

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- 1 Most rapid N uptake occurs from 50 - 75 days after planting
- 2 At or shortly after R4 (Reproductive Phase 4 - Soft Dent to Early Dent) or ~94 Days after Emergence (~ 1950 - 2100 GDD). The corn is ready for silage.
- 3 N Uptake continues after 60 days, however the rate begins to decline
- 4 This information is based on yield goals. (308 bushel yield (~34 tons of silage))

Nutrient use should be based on growth stage.

Critical periods from planting until ear development require different inputs to maximize yield and reduce nutrient loss.

Moisture levels and Soil Compaction will greatly reduce corn yield. Total water use is shown on an adjacent page and soil compaction above 200 p.s.i. will result in poor nutrient uptake and elevated disease potential.

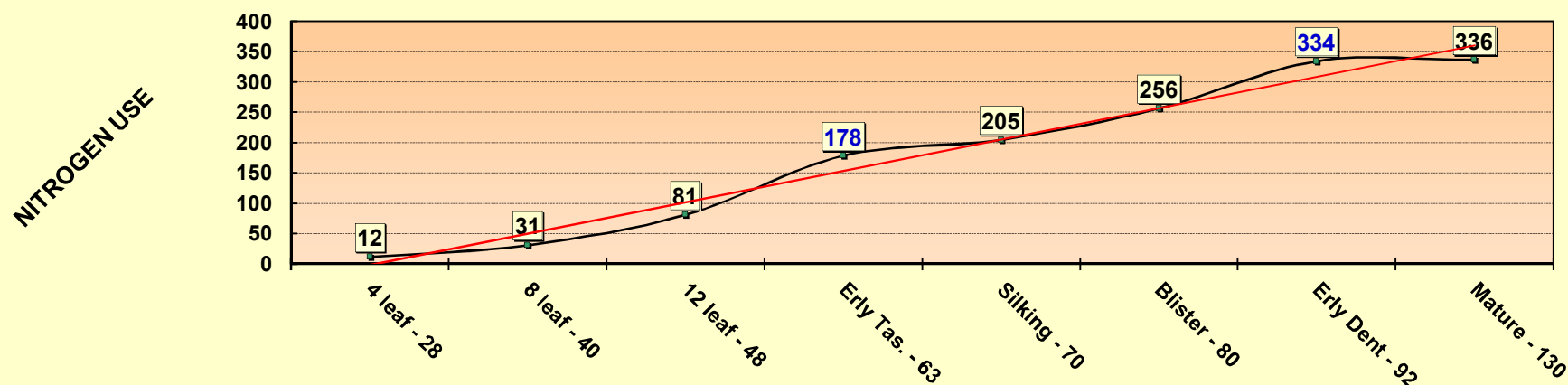
Pounds of Dry Matter Accumulation and Nutrients Absorbed per Acre by Corn Plants at Different Growth Stages.

Growth Stage in DAYS	4 leaf - 28	8 leaf - 40	12 leaf - 48	Early Tas. - 63	Silking - 70	Blister - 80	Early Dent - 92	Mature - 130
Days after plant.	28	40	48	63	70	80	92	130
D. M. Accumulate	275	825	2,918	9,075	12,325	15,948	26,324	27,596
N	12	31	81	178	205	256	334	336
P ₂ O ₅	2	7	19	56	66	79	122	136
K ₂ O	19	57	106	301	331	343	386	364
Ca	1.0	3.9	13.6	34.1	39.9	43.8	49.7	51.6
Mg	1.0	1.9	5.8	16.6	19.5	25.3	37.0	38.0
S	0.6	1.9	4.9	12.7	14.6	18.5	32.1	35.1
Ensilage Yield Goal =			DAY 48 % OF TOTAL	DAY 63 % OF TOTAL	DAY 70 % OF TOTAL	DAY 80 % OF TOTAL	DAY 92 % OF TOTAL	CCS
Corn Bushel Goal =		300	24.1%	53.0%	60.9%	76.2%	99.4%	
T Silage Goal	33.1	is equal to	300	Bushels				

$$y = 38.979x - 40.205$$

CORN NUTRIENT USE

Relative to Nitrogen use.



The greatest growth slope is at 12 leaf until EarlyTassel and again between Blister just before Early Dent.