NCDA&CS Agronomic Division **Phone: (919) 733-2655** **Website: www.ncagr.gov/agronomi/** **Report No.** FY19-SL023895

Internal

Soil Report

Mehlich-3 Extraction

Links to Helpful Information

Client: Horticultural Crops Research Station / Clinton
2450 Faison Hwy
Clinton, NC 28328

Sampled County : Sampson

Client ID: 403047

Advisor:

Advisor ID:

Sampled: 11/01/2018 **Received:** 02/07/2019 **Completed:** 02/13/2019 **Farm:** Resstation

Sample ID: G02

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Vegetables, other	0.0	80-100	10	50	0	0	0	0	0	0	Note: 6
2 - Corn, grain	0.0	120 - 160	0	0	0	0	0	0	0	0	Note: 3

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.22	1.35	3.0	76	0.7	5.8	112	85	44	17	26	93	66	73	74	74	65	0.1	3		

Sample ID: G03

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Vegetables, other	0.3	80-100	0	80	0	0	0	0	0	0	Note: 6
2 - Corn, grain	0.0	120 - 160	0	20	0	0	0	0	0	0	Note: 3

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.36	1.33	3.3	74	0.9	5.7	218	65	50	14	28	117	80	87	134	134	94	0.1	3		

Sample ID: G04

Lime History:
0.30 tons/acre; 3/2018

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Vegetables, other	0.0	80-100	0	150	0	25	0	0	0	0	Note: 6
2 - Cantaloupe/Melons	0.0	60-80	0	150	0	25	0	0	0	0.0	Note: 6

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.18	1.45	2.0	76	0.5	6.0	168	34	49	19	15	66	49	49	110	110	42	0.1	5		

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

Thank you for using agronomic services to manage nutrients and safeguard environmental quality.

- *Steve Troxler, Commissioner of Agriculture*

Sample ID: G05

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Vegetables, other	0.0	80-100	0	90	0	25	0	0	0	0	Note: 6
2 - Corn, grain	0.0	120 - 160	0	30	0	25	0	0	0	0	Note: 3

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.27	1.46	2.7	73	0.7	5.8	170	60	46	15	19	102	71	78	104	104	50	0.1	4		

Sample ID: G06

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Switchgrass	0.0	120-160	0	90	0	25	0	0	0	0	Note: 12
2 - Switchgrass	0.0	120-160	0	90	0	25	0	0	0	0	Note: 12

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.13	1.41	1.8	69	0.6	5.6	88	20	44	19	15	27	39	39	40	40	31	0.1	6		

Sample ID: G07

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Switchgrass	0.0	120-160	0	100	0	25	0	0	0	0	Note: 12
2 - Switchgrass	0.0	120-160	0	100	0	25	0	0	0	0	Note: 12

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.18	1.40	1.9	64	0.7	5.4	137	18	44	15	17	32	44	44	75	75	35	0.1	5		

Sample ID: G08

Lime History:
0.30 tons/acre; 3/2018

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Soybean	0.0	0	0	50	0	25	0	0	0	0	Note: 3
2 - Vegetables, other	0.0	80-100	0	130	0	25	0	0	0	0	Note: 6

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.22	1.40	2.4	75	0.6	5.8	181	43	50	16	19	90	64	64	204	204	75	0.1	4		

Sample ID: G09

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Sweetpotato	0.4	60-90	0	50	0	25	0	0	0	0.5	Note: 6
2 - Soybean	0.0	0	0	30	0	25	0	0	0	0	Note: 3

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.18	1.44	2.4	68	0.8	5.5	189	55	41	15	17	186	129	122	120	120	56	0.1	4		

Sample ID: G10

Lime History:
0.30 tons/acre; 3/2018

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Vegetables, other	0.0	80-100	0	190	0	25	0	0	0	0	Note: 6
2 - Soybean	0.0	0	0	100	0	25	0	0	0	0	Note: 3

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.13	1.45	1.7	74	0.4	6.0	158	18	47	21	13	120	82	82	91	91	43	0.1	6		

Sample ID: G11

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Hardwood, M	0.0	80-120	0	30	25			0	0	0	Note: 11
2 - Hardwood, M	0.0	80-120	0	30	$			0	0	0	Note: 11 Note: $

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.09	1.43	1.6	62	0.6	5.3	80	22	41	14	14	33			66	66	27	0.1	6		

Sample ID: G12

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Tobacco, flue-cured	0.0	50-80	0	100	0	25	0	0	0	0	Note: 1
2 - Hardwood, M	0.0	80-120	0	0	0			0	0	0	Note: 11

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.13	1.40	2.8	76	0.7	5.9	128	47	49	19	18	79	57		112	112	44	0.1	4		

Sample ID: H02

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Soybean	0.0	0	0	90	0	25	0	0	0	0	Note: 3
2 - Small Grain (SG)	0.0	80-100	0	90	0	25	0	0	0	0	Note: 3

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.13	1.47	1.8	71	0.5	5.9	167	25	48	16	15	115	79	79	126	126	77	0.1	6		

Sample ID: H03

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Soybean	0.3	0	0	70	25	25	0	0	0	0	Note: 3
2 - Small Grain (SG)	0.0	80-100	0	70	$	25	0	0	0	0	Note: 3 Note: $

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.13	1.49	1.7	62	0.6	5.5	158	34	38	14	16	99	69	69	83	83	55	0.0			

Sample ID: M01

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Sweetpotato	0.0	60-90	0	150	0	25	0	0	0	0.5	Note: 6
2 - Vegetables, other	0.0	80-100	0	180	0	25	0	0	0	0	Note: 6

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.22	1.50	1.9	69	0.6	5.7	212	24	46	17	14	83	67	60	337	337	63	0.1	5		

Sample ID: M02

Lime History:
0.40 tons/acre; 3/2018

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Sweetpotato	0.3	60-90	0	50	0	25	0	0	0	0.5	Note: 6
2 - Vegetables, other	0.0	80-100	0	110	0	25	0	0	0	0	Note: 6

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.36	1.43	2.6	65	0.9	5.7	219	53	40	15	18	113	85	78	133	133	84	0.1	4		

Sample ID: M03

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Sweetpotato	0.3	60-90	0	20	0	25	0	0	0	0.5	Note: 6
2 - Vegetables, other	0.0	80-100	0	80	0	25	0	0	0	0	Note: 6

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.18	1.39	2.2	66	0.8	5.6	148	66	35	17	23	74	61	54	135	135	51	0.1	5		

Sample ID: M04

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Sweetpotato	0.4	60-90	0	50	0	25	0	0	0	0.5	Note: 6
2 - Vegetables, other	0.0	80-100	0	100	0	25	0	0	0	0	Note: 6

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.46	1.42	2.7	66	0.9	5.6	177	55	42	14	19	95	74	67	135	135	82	0.1	4		

Sample ID: M05

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Sweetpotato	0.3	60-90	0	40	0	25	0	0	0	0.5	Note: 6
2 - Vegetables, other	0.0	80-100	0	90	0	25	0	0	0	0	Note: 6

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.18	1.41	2.0	66	0.7	5.6	120	59	37	14	16	77	63	56	85	85	51	0.1	5		

Sample ID: M06

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Sweetpotato	0.5	60-90	0	80	0	25	0	0	0	0.5	Note: 6
2 - Vegetables, other	0.0	80-100	0	130	0	25	0	0	0	0	Note: 6

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.32	1.41	2.2	58	0.9	5.4	204	44	37	12	18	74	61	54	115	115	72	0.1	5		

Sample ID: M07

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Sweetpotato	0.4	60-90	0	0	0	20	0	0	0	0.5	Note: 6
2 - Vegetables, other	0.0	80-100	40	60	0	20	0	0	0	0	Note: 6

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.22	1.24	3.0	71	0.9	5.6	90	78	40	18	23	62	54	47	37	37	46	0.1	3		

Sample ID: P02

Lime History:
0.50 tons/acre; 2/2018

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Corn, grain	0.0	120 - 160	0	60	0	25	0	0	0	0	Note: 3
2 - Vegetables, other	0.0	80-100	30	140	0	25	0	0	0	0	Note: 6

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.18	1.36	2.4	75	0.6	5.9	99	38	44	24	16	52	48	41	30	30	35	0.1	4		

Sample ID: P03

Lime History:
0.40 tons/acre; 2/2018

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Corn, grain	0.0	120 - 160	0	10	0	25	0	0	0	0	Note: 3
2 - Vegetables, other	0.0	80-100	0	70	0	25	0	0	0	0	Note: 6

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.32	1.33	3.1	77	0.7	6.0	123	70	45	21	19	73	61	54	56	56	49	0.1	3		

Sample ID: P04

Lime History:

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Vegetables, other	0.0	80-100	0	70	0	25	0	0	0	0	Note: 6
2 - Corn, grain	0.0	120 - 160	0	10	0	25	0	0	0	0	Note: 3

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-AI1	Mn-AI2	Zn-I	Zn-AI	Cu-I	Na	ESP	SS-I	NO_3-N
0.27	1.36	2.8	74	0.7	5.9	130	73	42	19	18	71	53	60	49	49	54	0.1	4		

Sample ID: P05

Lime History:
0.40 tons/acre; 2/2018

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Corn, grain	0.0	120 - 160	20	0	0	0	0	0	0	0	Note: 3
2 - Vegetables, other	0.0	80-100	110	30	0	0	0	0	0	0	Note: 6

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
0.22	1.29	3.9	80	0.8	6.0	51	98	43	24	29	51	47	40	34	34	38	0.0			

Sample ID: P06

Lime History:
0.50 tons/acre; 2/2018

Recommendations: Crop	Lime (tons/acre)	Nutrients (lb/acre) N	P_2O_5	K_2O	Mg	S	Mn	Zn	Cu	B	More Information
1 - Vegetables, other	0.0	80-100	140	20	0	0	0	0	0	0	Note: 6
2 - Corn, grain	0.0	120 - 160	50	0	0	0	0	0	0	0	Note: 3

Test Results [units - W/V in g/cm^3; CEC and Na in meq/100 cm^3; NO_3-N in mg/dm^3]: **Soil Class:** Mineral

HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO_3-N
0.18	1.24	4.1	80	0.8	6.0	38	105	43	24	37	44	36	43	30	30	35	0.0			

Understanding the Soil Report: explanation of measurements, abbreviations and units

Recommendations

Lime

If testing finds that soil pH is too low for the crop(s) indicated, a ***lime recommendation*** will be given in units of either ton/acre or lb/1000 sq ft. For best results, mix the lime into the top 6 to 8 inches of soil several months before planting. For no-till or established plantings where this is not possible, apply no more than 1 to 1.5 ton/acre (50 lb/1000 sq ft) at one time, even if the report recommends more. You can apply the rest in similar increments every six months until the full rate is applied. If MG is recommended and lime is needed, use dolomitric lime.

Fertilizer

Recommendations ***for field crops or other large areas*** are listed separately for each nutrient to be added (in units of lb/acre unless otherwise specified). Recommendations for N (and sometimes for B) are based on research/field studies for the crop being grown, not on soil test results. K-I and P-I values are based on test results and should be > 50. If they are not, follow the fertilizer recommendations given. If Mg is needed and no lime is recommended, 0-0-22 (11.5% Mg) is an excellent source; 175 to 250 lb per acre alone or in a fertilizer blend will usually satisfy crop needs, SS-I levels appear only on reports for greenhouse soil or problem samples.

Farmers and other commercial producers should pay special attention to ***micronutrient levels***. If *$*, *pH$*, *$pH*, *C* or *Z* notations appear on the soil report, refer to *$Note: Secondary Nutrients and Micronutrients*. In general, homeowners do not need to be concerned about micronutrients. Various crop notes also address lime fertilizer needs; visit ncagr.gov/agronomi/pubs.htm.

Recommendations ***for small areas, such as home lawns/gardens,*** are listed in units of lb/1000 sq ft . If you cannot find the exact fertilizer grade recommended on the report, visit *www.ncagr.gov/agronomi/obpart4.htm#fs* to find information that may help you choose a comparable alternate. For more information, read *A Homeowner's Guide to Fertilizer.*

Test Results

The first seven values [soil class, HM%, W/V, CEC, BS%, Ac and pH] describe the soil and its degree of acidity. The remaining 16 [P-I, K-I, Ca%, Mg%, Mn-I, Mn-AI1, Mn-AI2, Zn-I, Zn-AI, Cu-I, S-I, SS-I, Na, ESP, SS-I, NO_3-N (not routinely available)] indicate levels of plant nutrients or other fertility measurement. Visit *www.ncagr.gov/agronomi/uyrst.htm*

Report Abbreviations

Ac	exchangeable acidity
B	boron
BS%	% CEC occupied by basic cations
Ca%	% CEC occupied by calcium
CEC	cation exchange capacity
Cu-I	copper index
ESP	exchangeable sodium percent
HM%	percent humic matter
K-I	potassium index
K_2O	potash
Mg%	% CEC occupied by magnesium
MIN	mineral soil class
Mn	manganese
Mn-AI1	Mn-availability index for crop 1
Mn-AI2	Mn-availability index for crop 2
Mn-I	manganese index
M-O	mineral-organic soil class
N	nitrogen
Na	sodium
NO_3-N	nitrate nitrogen
ORG	organic soil class
pH	current soil pH
P-I	phosphorus index
P_2O_5	phosphate
S-I	sulfur index
SS-I	soluble salt index
W/V	weight per volume
Zn-AI	zinc availability index
Zn-I	zinc index