

### Kale, fresh market (Code #150)

| Soil Test Rating   | Potassium  |  |   |                                       |
|--|--|--|---|---------------------------------------|
|  | Low K  | Medium K                                   | High K                                      | Very High K                           |
|  | Coast: 0-70 lbs/A<br>Pied: 0-120 lbs/A   | Coast: 71-170 lbs/A<br>Pied: 121-250 lbs/A | Coast: 171-275 lbs/A<br>Pied: 251-400 lbs/A | Coast: 275+ lbs/A<br>Pied: 400+ lbs/A |
| Phosphorus   | <i>Recommended Pounds N-P<sub>2</sub>O<sub>5</sub>-K<sub>2</sub>O per Acre</i> |  |   |                                       |
| <b>Low P</b><br>Coast: 0-30 lbs/A<br>Pied: 0-20 lbs/A      | *-200-200  | *-200-150                                  | *-200-100                                   | *-200-75                              |
| <b>Medium P</b><br>Coast: 31-60 lbs/A<br>Pied: 21-40 lbs/A | *-150-200  | *-150-150                                  | *-150-100                                   | *-150-75                              |
| <b>High P</b><br>Coast: 61-100 lbs/A<br>Pied: 41-75 lbs/A  | *-100-200  | *-100-150                                  | *-100-100                                   | *-100-75                              |
| <b>Very High P</b><br>Coast: 100+ lbs/A<br>Pied: 75+ lbs/A | *-75-200   | *-75-150                                   | *-75-100                                    | *-75-75                               |

Coast = Coastal Plain Pied = Piedmont, Mountain, and Limestone Valley

#### Recommendations:

|                 |   |                            |                      |                           |                     |          |                       |                            |                     |
|-----------------|---|----------------------------|----------------------|---------------------------|---------------------|----------|-----------------------|----------------------------|---------------------|
| Recommended pH: | 6.3 to 6.8. If the pH is less than 6.3, see Lime Table B.   |                            |                      |                           |                     |          |                       |                            |                     |
| Nitrogen:       | Coastal Plain 175-225 pounds nitrogen (N) per acre.<br><br>Piedmont, Mountain, Limestone Valley 150-180 pounds nitrogen (N) per acre.   |                            |                      |                           |                     |          |                       |                            |                     |
| Magnesium:      | If soil test Mg level is low and lime is recommended, use dolomitic limestone; if soil test Mg is low and lime is not recommended, apply 25 pounds of Mg/Acre.<br><br><table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Coastal Plain</td> <td>Low: 0 - 60 lbs/acre</td> <td>Medium: 61 - 120 lbs/acre</td> <td>High: &gt;120 lbs/acre</td> </tr> <tr> <td>Piedmont</td> <td>Low: 0 - 120 lbs/acre</td> <td>Medium: 121 - 240 lbs/acre</td> <td>High: &gt;240 lbs/acre</td> </tr> </table> | Coastal Plain              | Low: 0 - 60 lbs/acre | Medium: 61 - 120 lbs/acre | High: >120 lbs/acre | Piedmont | Low: 0 - 120 lbs/acre | Medium: 121 - 240 lbs/acre | High: >240 lbs/acre |
| Coastal Plain   | Low: 0 - 60 lbs/acre  | Medium: 61 - 120 lbs/acre  | High: >120 lbs/acre  |                           |                     |          |                       |                            |                     |
| Piedmont        | Low: 0 - 120 lbs/acre   | Medium: 121 - 240 lbs/acre | High: >240 lbs/acre  |                           |                     |          |                       |                            |                     |
| Zinc:           | If the Zn soil test level is low, apply 5 pounds of zinc per acre.  |                            |                      |                           |                     |          |                       |                            |                     |
| Sulfur:         | Apply 10 pounds of sulfur (S) per acre.   |                            |                      |                           |                     |          |                       |                            |                     |
| Boron:          | Apply 2 pounds of boron (B) per acre.   |                            |                      |                           |                     |          |                       |                            |                     |
| Calcium:        | If soil test calcium is less than 800 pounds/acre and pH is 6.5 or greater, apply 1,000 pounds gypsum per acre.   |                            |                      |                           |                     |          |                       |                            |                     |

**Kale, fresh market (Code #150) continued**

**Fact Sheet:**

Nitrogen (N) rates will vary depending on rainfall, soil type, irrigation, plant population and method and timing of applications.

For transplants, apply a starter solution using 3 pounds of 10-34-0 per 50 gallons of water.

For early growth stimulation apply a pop-up fertilizer using 100 to 150 pounds of 10-34-0 or similar material per acre. Apply the fertilizer 2 to 3 inches to the side of the seeds or plants and 2 to 3 inches below the seeds or roots.

Sulfate of potash magnesia may be used to supply a portion of the recommended potash ( $K_2O$ ) and to also supply magnesium (Mg) and sulfur (S).

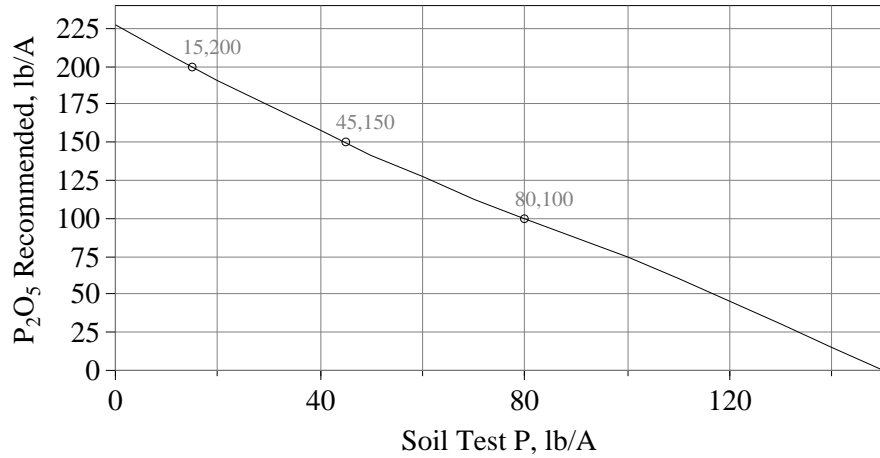
For more efficient use of fertilizer split the applications, applying one-third to one-half down (banded or incorporated in the bed) and the remainder in 1 to 3 applications. If the fertilizer is broadcast, increase the application rates of phosphate ( $P_2O_5$ ) and potash ( $K_2O$ ) 1½ to 2 times.

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V - 188

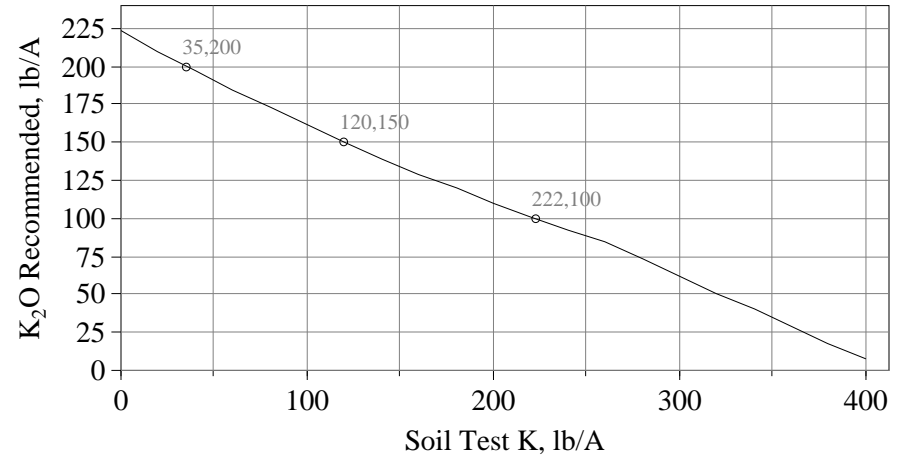
P Recommendations, Coastal Plain

if (P < 100)  $P_2O_5 = 227 - 1.886P + 0.00366P^2$   
 if (P ≥ 100)  $P_2O_5 = 225 - 1.50P$



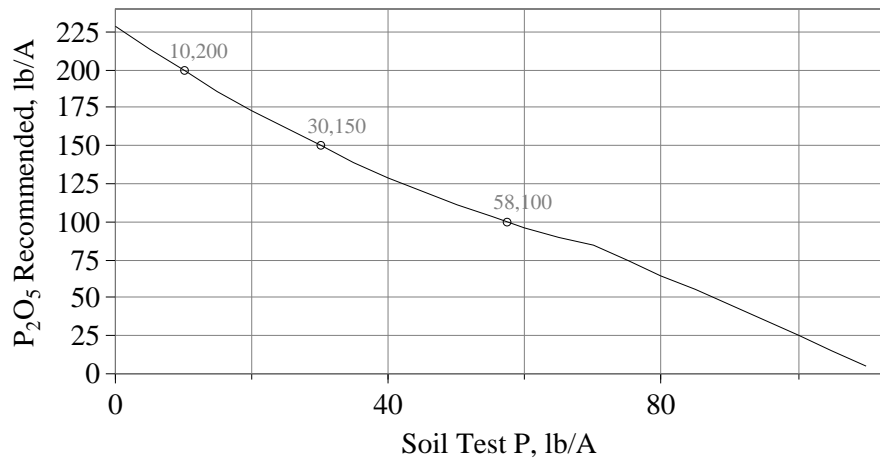
K Recommendations, Coastal Plain

if (K < 275)  $K_2O = 223 - 0.672K + 0.00054K^2$   
 if (K ≥ 275)  $K_2O = 227 - 0.55K$



P Recommendations, Piedmont

if (P < 75)  $P_2O_5 = 229 - 3.074P + 0.01435P^2$   
 if (P ≥ 75)  $P_2O_5 = 225 - 2.00P$



K Recommendations, Piedmont

if (K < 400)  $K_2O = 226 - 0.439K + 0.00016K^2$   
 if (K ≥ 400)  $K_2O = 228 - 0.38K$

