

N-Cal 212 For Peanuts

Adequate levels of available calcium are essential to both yield and quality of peanuts. It should be understood that all forms of calcium will supply the peanut's calcium needs, with some forms being more soluble, therefore, more available than others (see Figure 1 below). Basic slag, dolomite and calcite limestone are good sources of calcium, however, the fact that the calcium in these materials are in the oxide and carbonate forms renders them less attractive as a calcium source for peanuts because of reduced water solubility.

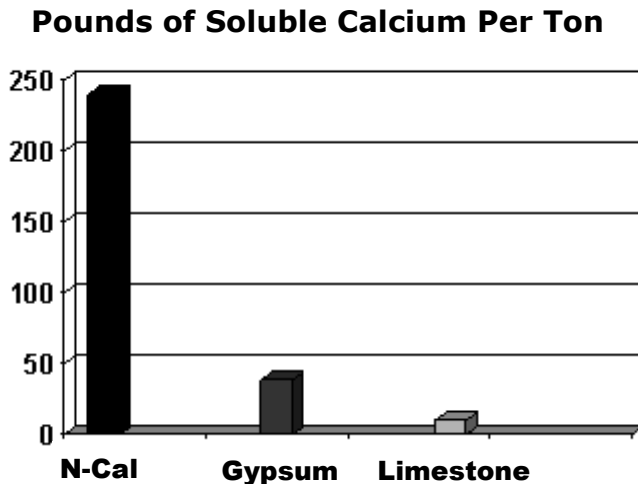


Figure 1

Gypsum, landplaster, calcium sulfate – regardless of what you call it, has been an extremely important tool in peanut production because it was the most soluble mineral form of calcium until now.

N-Cal[®] is a liquid form of calcium composed of calcium chloride and urea and is 350 times more soluble than gypsum. This product differs from other liquid calcium products in

that it is applied to the soil instead of to foliage. When soluble calcium is applied to peanuts – in the pegging zone – not only are you supplying calcium but also metabolically, you are enhancing growth, yield and quality.

Let's briefly take a look at a few points emphasizing the importance of calcium as it relates to peanut production:

- ◆ It is imperative to have ample calcium in the pegging zone (top 3 - 4 inches), as calcium is not translocated sufficiently from the plant to the pod but is taken up directly by the pod.

N-Cal 212 will supply ample calcium when applied either at planting before peanuts emerge or through the irrigation water at first bloom.

- ◆ Calcium is extremely beneficial in reducing aflatoxin. Recent research has shown that plots treated with a soluble calcium experienced a significant reduction in aflatoxin over untreated plots. This makes calcium extremely important in dry years when aflatoxin is more prevalent.

N-Cal 212 is a 100% water soluble calcium source.

- ◆ Adequate levels of soluble calcium in the pegging zone will reduce “pops.” Pops can cause a reduction in grade, as well as a reduction in seed germination.

In field tests and university research (see Table 1 below), N-Cal 212 has

| Table 1: 2001 Georgia Field Results | | | |
|--|--------------|--------------------|--------------|
| City | N-Cal | Landplaster | Check |
| Willacoohee, Ga. | 78 | 77 | N/A |
| Albany, Ga. | 73 | 73 | N/A |
| Blakely, Ga. | 75 | 72 | N/A |
| McRae, Ga. | 72 | N/A | 69 |
| Braindridge, Ga. | 78 | N/A | 78 |
| Tifton Ga. | 77 | 76 | 75 |

shown to increase grades by up to 3 points over landplaster.

- ◆ Calcium requirements are directly related to seed size. The larger the seed the more calcium is required. It is absolutely essential to apply soluble calcium to all large seed type peanuts (Virginia type) and is recommended for the runner type.

Application Rates and Timing:

- ◆ Apply 10 gallons per acre in a 14 to 16 inch band at planting before peanuts emerge.
- ◆ Apply 20 gallons per acre through the irrigation water at or before first bloom

! Warning: Avoid mixing N-Cal with sulfates or phosphates.