



IRRIGATION AND FERTIGATION RECOMMENDATIONS FOR PEANUTS

by Ilan Bar, Agronomist, Netafim USA

| Crop | Nutrient | Requirements | for | 5,000-5,500 lbs./ | Acre |
|------|----------|--------------|-----|-------------------|------|
|------|----------|--------------|-----|-------------------|------|

| Арр | lication | rate | ("/hr.) |) = |
|-----|----------|------|---------|-----|
|-----|----------|------|---------|-----|

231 x flow rate of a dripper (G.P.H.)

spacing between lines (") x spacing between drippers (")

| | N | P ₂ O ₅ | K ₂ O |
|------------------------|---|-------------------------------|------------------|
| Pre-plant - (lbs./Ac.) | | 50 | 100 |
| ertigated - (lbs./Ac.) | | 25 | 50 - 75 |
| iotal - (lbs./Ac.) | | 75 | 150 - 175 |

The irrigation recommendations are based on no rain. Efficiency of rain should be estimated at 80% and be deducted from the recommendations. Normally a rain of 0.15" - 0.2" or less should not be considered. Final decision should be made based on the above in addition to common sense, judgement and local experience. Soil moisture sensors or tensiometers can be very helpful tools.

If it rains such that a week has gone by without irrigation, then the system will be turned on just to fertigate the weekly scheduled amount. Such a technical fertigation should last no more than one (1) hour including filling up, injection and flushing time.

The above listed guidelines are based on general assumption that the levels of Phosphorous and Potassium in the soil are medium to low.

If soil analysis is available, these recommendations should be adjusted accordingly, based on the analysis recommendations.

The same is applicable to Calcium, Magnesium, Sulfur and minor elements. All of these can be applied as pre-plant (liming) or foliar (minor elements). In case of big deficiencies, those elements can be fertigated (mainly Ca, Mg, and S).

Consult with your local fertilizer supplier or Netafim Agronomist in the adaptability of the various fertilizers to drip systems.

Calcium application will be applied before bloom, as recommended as conventional irrigation. Commonly 500 - 1000 lbs./Ac. of Landplaster on runners and Spanish type and up to 1500 lbs./Ac. on Virginia types.

Boron will be applied pre-plant or foliar, as recommended on conventional peanuts. Split applications of 0.5 lbs./Ac. - B are recommended via fertigation before bloom and on sandy soils. A good formulation of liquid fertilizer could be 0 - 5 - 10.

Irrigation and Fertigation Guidelines

| Crop Stage | Planting - Emergence | Emergence - Flowering/Pegging |
|-------------------------------|----------------------|-------------------------------|
| Days | 0 - 14 | 14 - 50 |
| Irrigation ("/day) | 0.05" - 0.08" | 0.08" - 0.18" |
| Intervals (days) | 2 - 3 | 1 |
| Fertigation (lbs./Ac/stage-P) | 5 | 10 |

| Crop Stage | Flowering/Pegging - Pod Formation | Pod Formation - Harvest |
|-------------------------------|-----------------------------------|-------------------------|
| Days | 50 - 110 | 110 - 140 |
| Irrigation ("/day) | 0.18" - 0.28" | 0.28" - 0.12" |
| Intervals (days) | 1 | 1 |
| Fertigation (lbs./Ac/stage-P) | 10 | |

Note: Do not exceed irrigation time of 2.0 hr./application, otherwise split to two or three applications

