**Fruit Growers Laboratory - Avocado**

**Nitrogen Management Plan – Calculating Nitrogen Demand**

Yield Method (based on fruit removal) = **2.50 lbs. of N per 1000 lbs. of fruit**

|  |  |  |
| --- | --- | --- |
| **Yield (1000 lbs.)** | **Percent Canopy** | **N RATE (lbs.) for Season**  |
| 0 |  |  |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
| 8 |  |  |
| 9 |  |  |
| 10 **(See example)** | 100 | **79** |
| 11 |  |  |
| 12 |  |  |
| 13 |  |  |
| 14 |  |  |
| 15 |  |  |
| 16 |  |  |
| 17 |  |  |
| 18 |  |  |
| 18+ (same rate as 18) |  |  |

**Example:** 10,000 lb. yield = 10 X 2.50 lbs. + 30 lbs. (% canopy maintenance N) divided by 0.7 NUE (70 % nitrogen use efficiency for solid set sprinklers) = **79 lbs. of N required for season.**

|  |  |  |
| --- | --- | --- |
| **\*Percent Canopy** | **Tree Maintenance N (lbs.)** | **Approximate Tree Age (Years)** |
| 100 | 30 | 8+ |
| 80 | 27 | 6-7 |
| 60 | 24 | 5-6 |
| 40 | 21 | 4-5 |
| 20 | 18 | 3-4 |
| 10 or less | 15 | 1-2 |

\***Projected Yield** is determined by calculating total yield in lbs. from previous years pack out records as well as field estimates. Actual Yield (Pack out) values from your packing company will be used at the end of the season and reported on the NMP worksheet to evaluate projected program efficiency.

\***Percent Canopy** is determined by estimating the shaded or vegetated coverage area of an orchard from an aerial view. This method determines the amount of nitrogen needed by trees of varying size and age for the maintenance and development of leaves, shoots, branches, trunks and roots.

**Nitrogen Credits - Nitrogen from Other Sources**

Nitrogen from other sources such as; Nitrate-nitrogen from irrigation water, soil residual Nitrate-nitrogen, foliar sprays, cover crops and organic inputs are to be included in the Nutrient Management Worksheet as credits that are subtracted from tree nitrogen demand to determine the amount of any additional N that you may need to apply.