

# Mango Nutrition and Fertilization

By Oscar F. Ruiz Jr. D.P.M.

**pH:** Mildly acid to mildly alkaline soils (6.0-7.5)

**Table 1. Fertilizer recommendations for mango production according to tree age and yield.**

Taken from: Avilan, Luis. Fertilización del Mango en el Trópico. Int. Plant Nut. Inst.

Age (Years)	Yield (Kg/tree)	N a - b*	P <sub>2</sub> O <sub>5</sub> ** a - b*	K <sub>2</sub> O** a - b*
		grams/tree/year		
2	4	20 - 25	10 - 12	25 - 30
4	56	230 - 250	115 - 175	225 - 420
6	80	330 - 500	165 - 250	395 - 600
8	160	660 - 995	330 - 490	790 - 1195
10	220	908 - 1360	450 - 680	1090 - 1630
12	300	1322 - 1980	660 - 990	1580 - 2370
14	320	1322 - 1980	660 - 990	1580 - 2370
16	320	1322 - 1980	660 - 990	1580 - 2370
18	320	1322 - 1980	660 - 990	1580 - 2370
20	220	908 - 1360	450 - 680	1090 - 1630
22	220	908 - 1360	450 - 680	1090 - 1630
24	220	908 - 1360	450 - 680	1090 - 1630
26	160	660 - 995	330 - 490	790 - 1195
28	160	660 - 995	330 - 490	790 - 1195

\* - "a" = minimum to apply, "b" = maximum to apply. Nitrogen application should vary according to cultivar, yield, soil type, and environmental conditions.

\*\* - Base P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O applications on soil test results. On soils with high nutrient levels, apply the lower rate "a". On soils with medium nutrient levels, apply a rate between "a" and "b". On soils with low nutrient levels, apply the high rate "b".

Fertilizer applications may be split in order to prevent root injury and/or improve efficacy.



Proper mango nutrition cannot be based solely on soil analyses results. Soil analyses may or may not be representative of what nutrients are available to the plant. Actual plant nutrient availability can only be determined by a plant tissue analysis. Soil analyses and plant tissue analyses results should be used together to determine a more effective approach to mango nutrition.

**Figure 3. Plant tissue sufficiency levels for mango.**

From: Mills, H. A. y J. B. Jones Jr. 1996. Plant Analysis Handbook II.

Element	N %	P %	K %	Ca %	Mg %	S %	B ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm
High	2.00	0.35	1.50	5.00	0.50	0.35	150	200	200	200	100
Low	1.00	0.08	0.50	1.50	0.15	0.12	25	20	50	50	8

**Development stage:** *Post-flowering*  
**Plant part:** Mature leaves from new growth  
**Quantity:** 25+ leaves

P

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## References

Avilan, Luis. Fertilización del Mango en el Trópico. International Plant Nutrition Institute. [www.ipni.net](http://www.ipni.net)

Mills, H. A. y J. B. Jones Jr. 1996. Plant Analysis Handbook II.