

Nutrients applied each year are used by the vines to grow the vegetative parts (roots, trunks, canes and leaves) and the clusters that become fruit to be harvested. The chart below shows the amount of each nutrient element removed from the vineyard by harvesting. For example, a crop yield of 4 tonnes per acre would need at least 9 kg of actual Nitrogen, 0.80 kg of actual Phosphorus and 14 kg of actual Potassium applied by a N-P-K fertilizer the following spring to the vineyard to replace the nutrient removal at harvest from the previous year.

Considering this can help when planning a nutrient program.

Crop Removal from Vineyard of Nutrients by Harvested Grapes

Element	Pounds/ton	Kilograms/tonne
Nitrogen N	4.50	2.25
Calcium Ca	0.50	0.25
Potassium K	6.75	3.50
Magnesium Mg	0.40	0.20
Phosphorus P	1.50	0.80
Boron B	0.005 (0.08 ounces) > 1/16 teaspoon	6.0 grams
Copper Cu	0.002 (0.032 ounces) > 1/16 teaspoon	2.5 grams
Iron Fe	0.01 (0.16 ounces) > 1/16 teaspoon	15 grams
Manganese Mn	0.005 (0.08 ounces) > 1/16 teaspoon	7 grams
Zinc Zn	0.02 (0.32 ounces) Approx. 1/8 teaspoon	30 grams