



Cherry phenological phases and their nutrition requirements

Nitrogen remobilized from the tree's reserves support spur leaves growth until petal fall. Roots take up nitrogen mainly after bloom, to support shoot and root growth. Nitrogen goes into fruit mainly after the stage of fruit's intense cell division.

Recommended N-P-K-Ca-Mg ratios, applied by fertigation via drip irrigation, across main growth stages of Cherry trees, with an expected yield of 15-20 MT/ha.

Phenological stage	N:P ₂ O ₅ :K ₂ O:CaO:MgO				Reasoning
Bud-break to fruit-set	N K ₂ O MgO	1 1,33 0,1	P ₂ O ₅ CaO	0,83 0,4	Relatively high requierement for all nutrients, for building up all new season's vegetative and regenerative organs.
Fruit growth	N K ₂ O MgO	1 1,11 0,11	P ₂ O ₅ CaO	0,0 0,3	High K demand for fruit formation; continuous demand for Ca and Mg for vegetative organs.
Fruit maturation to end of harvest	N K ₂ O MgO	1 2,0 0,51	P ₂ O ₅ CaO	0,0 0,3	Very high K demand for fruit formation and its bulking up; upsurge in Mg demand.
End of harvest to leaf drop	N K ₂ O MgO	1 1,33 0,13	P ₂ O ₅ CaO	2,0 0,1	Increasing nutrients concentrations, to be stored in the branches during the formancy period, and released in the following spring.
	In addition to fertigation, foliar sprays can be done in the autumn when growth has ceased, but before natural leaf fall. Autumn sprays are beneficial and effective only when the trees are deficient of these particular nutrients. Foliar autumn nitrogen applications help in building up reserves, for the subsequent year's early growth. Autumn zinc and boron spray can benefit reproduction and early fruit development.				
Proporción total de aplicación (kg/ha)	K ₂ O	105 140 20	P ₂ O ₅ CaO	60 60	

Potassium nitrate should be used as the primary source of potassium, and a partial source of nitrogen. The balance of nitrogen should be sourced from calcium nitrate, magnesium nitrate and ammonium nitrate, as per the above-mentioned phase-specific rates.





