

Pumpkin (cv.Guamal)

Basic data and fertilizer adjustment equations.

Nutrient	Basic data			Fertilizer adjustment equations
	NR (kg/q)	Cs (%)	Cf (%)	
N	1.8	45	36	$FN = 4.9 T - 1.2 SN$
P_2O_5	0.6	57	21	$F P_2O_5 = 2.7 T - 2.7 S P_2O_5$
K_2O	1.7	47	86	$FK_2O = 2.0 T - 0.5 S K_2O$

Where NR - Nutrient Requirement (Kg/q)

Cs - Soil Efficiency;

Cf- Fertilizer Efficiency

T - Targeted yield(Q/ha);

SN - Soil available N (Kg/ha)

SP₂O₅ - Soil available P₂O₅ (Kg/ha)

SK₂O - Soil available K₂O (Kg/ha)

Ready reckoner of fertilizer doses at varying soil test values for specific yield targets.

Available soil nutrients (kg ha ⁻¹)			Fertilizer nutrients required (kg ha ⁻¹)								
			Targeted yield (50 q ha ⁻¹)			Targeted yield (60 q ha ⁻¹)			Targeted yield (70 q ha ⁻¹)		
N	P ₂ O ₅	k ₂ O	N	P ₂ O ₅	k ₂ O	N	P ₂ O ₅	k ₂ O	N	P ₂ O ₅	k ₂ O
80	15	60	76	55	40	124	81	60	174	108	80
100	20	80	52	41	30	100	68	50	150	94	70
120	25	100	28	27	20	76	54	40	126	81	60
140	30	120	20	20	20	52	41	30	102	68	50
160	35	140	20	20	20	28	28	20	78	52	40
180	40	160	20	20	20	24	20	20	54	38	30
200	50	180	20	20	20	20	20	20	30	24	20

(NB : when the calculated fertilizer requirement values are almost zero, a minimum dose, say 20 kg ha⁻¹ for N and 10 kg ha⁻¹ each for P and K are added to the calculated values to bring the dose to a reasonable one).