

Brinjal(cv.UtkalAnushree)

Basic data and fertilizer adjustment equations.

Nutrient	Basic data			Fertilizer adjustment equations
	NR (kg/q)	Cs (%)	Cf (%)	
N	0.7	22	37	$FN = 1.0 T - 0.3 SN$
P ₂ O ₅	0.3	60	38	$F P_2O_5 = 0.7 T - 1.6 S P_2O_5$
K ₂ O	0.5	56	77	$FK_2O = 4.7 T - 0.7 S K_2O$

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(200qha-1)			Targeted yield (225q ha-1)			Targeted yield(250 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
140	20	60	158	108	98	182	126	115	208	143	133
150	25	70	155	100	91	180	118	108	205	135	126
160	30	80	152	92	84	177	110	101	202	127	119
170	35	90	149	84	77	174	102	94	199	119	112
180	40	100	146	76	70	171	94	87	196	111	105
190	45	110	143	68	63	168	86	80	193	102	98
200	50	120	140	60	56	165	78	73	190	94	91
220	55	130	134	52	49	159	70	66	184	86	84
250	60	140	125	44	42	150	62	59	175	78	77
280	65	150	116	36	35	141	54	52	166	70	70

(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).