

Potato (cv.Ashoka)

Basic data and fertilizer adjustment equations.

Nutrient	Basic data			Fertilizer adjustment equations
	NR (kg/q)	Cs (%)	Cf (%)	
N	0.7	44	39	$FN = 1.8 T - 1.1 SN$
P_2O_5	0.2	89	48	$F P_2O_5 = 0.5 T - 1.8 S P_2O_5$
K_2O	0.5	65	50	$FK_2O = 1.1 T - 1.3 S K_2O$

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)

	Matiapada	Paddy crop (Lalat) Kharif				Paddy crop (Lalat) Rabi			
1.	Sri B. K. Panda	26	35	42(84%)	41(82%)	31.3	42.0	52.6(105%)	54.0(108%)
2.	Sri D. Pati	18	28	40(80%)	32 (64%)	30.0	38.3	54.0(108%)	58.3(117%)
3.	Sri B. Behera	18	25	36(72%)	41(82%)	28.8	38.1	50.3(101%)	52.3 (105%)
4.	Sri P. C. pradhan	20	24	32 (64%)	36 (72%)	31.8	375	50.0(100%)	51.1(102%)

(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).