

## Groundnut (cv.Smruti)

### Basic data and fertilizer adjustment equations.

Nutrient	Basic data			Fertilizer adjustment equations
	NR (kg/q)	Cs (%)	Cf (%)	
N	7.4	75	16	$FN = 4.5 T - 0.4 SN$
P <sub>2</sub> O <sub>5</sub>	1.3	49	32	$F P_2O_5 = 4.1 T - 1.5 S P_2O_5$
K <sub>2</sub> O	1.6	21	65	$FK_2O = 2.5 T - 0.3 S K_2O$

Where NR - Nutrient Requirement (Kg/q)

**Cs** - Soil Efficiency;

**Cf** - Fertilizer Efficiency

**T** - Targeted yield(Q/ha);

**SN** - Soil available N (Kg/ha)

**SP<sub>2</sub>O<sub>5</sub>** - Soil available P<sub>2</sub>O<sub>5</sub> (Kg/ha)

**SK<sub>2</sub>O** - Soil available K<sub>2</sub>O (Kg/ha)

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

Available soil nutrients (kg ha <sup>-1</sup> )			Fertilizer nutrients required (kg ha <sup>-1</sup> )								
			Targeted yield (15 q ha <sup>-1</sup> )			Targeted yield (20 q ha <sup>-1</sup> )			Targeted yield (25 q ha <sup>-1</sup> )		
N	P <sub>2</sub> O <sub>5</sub>	k <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	k <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	k <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	k <sub>2</sub> O
60	15	50	44	40	23	66	60	35	88	80	48
70	20	60	40	32	20	62	53	32	84	72	45
80	25	70	36	24	17	58	46	29	80	64	42
100	30	80	28	17	14	50	39	26	72	58	39
120	35	90	20	10	11	42	32	23	64	50	36
140	40	100	10	10	10	34	25	20	56	42	33
160	45	125	10	10	10	26	18	13	48	34	25
180	50	150	10	10	10	18	11	10	40	26	13
200	60	175	10	10	10	10	10	10	32	18	10
220	70	200	10	10	10	10	10	10	24	10	10

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