SOIL TEST BASED FERTILIZER PRESCRIPTION FOR DIRECT SEEDED RAINFED UPLAND RICE

Fertilizer adjustment equations were developed for direct seeded upland rice using the basic data. Based on theses equations, fertilizer recommendations were prescribed in the form of ready reckoner for desired target yield of 30 and 40 q/ha of direct seeded rice with different combination of NPK under rainfed upland situation of manipur.

The targeted yield equations for direct seeded rainfed upland rice in Manipur

Crop: upland rice (*cv* RC Maniphou 6)
Location: Langol Farm, ICAR Manipur Centre
Basic data and fertilizer adjustment equation for targeted yield

Basic data	N	P	K
Nutrient requirement (kg/q)	2.75	0.20	3.53
Soil efficiency (%)	9.63	12.15	21.34
Fertilizer efficiency (%)	52.92	13.73	126.04

Fertilizer adjustment equations

$FN = 5.19T - 0.18SN$
$FP = 1.48T - 0.89SP$
$FK = 2.80T - 0.17SK$

SN, SP and SK, soil available nitrogen, phosphorus and potassium (kg/ha); FN, FP and FK, fertilizer nitrogen, phosphorus and potassium required (kg/ha)

Ready-reckoner of fertilizer doses at varying soil test values for specific yield target

Available soil nutrients (kg/ha)			Fertilizer nutrient required (kg/ha)					
			Targeted yield 30 q/ha			Targeted yield 40 q/ha		
N	P	K	N	P_2O_5	K_2O	N	P_2O_5	K_2O
200	10	100	119	36	67	171	50	95
225	12	125	115	34	63	167	48	91
250	14	150	110	32	59	162	47	86
275	16	175	106	30	54	158	45	82
300	18	200	101	28	50	153	43	78
325	20	225	97	27	46	148	41	74
350	22	250	92	25	42	144	40	70
375	24	275	87	23	37	139	38	65
400	26	300	83	21	33	135	36	61