



NUTRIENT CONVERSION CHART

KALRO/Potato production Factsheet No. 043/2024

KALRO E-mimea Plant Clinic

Introduction

It is important to carry out soil nutrient analysis before fertilizer application in crop production. Based on results this analysis, crop nutrient requirements are derived. A nutrient conversion chart is used for this purpose. This is a visual tool that assists in computing nutrient amounts required for optimal growth and development of a specific crop, such as potatoes. It typically converts nutrient recommendations into practical measurements, such as kilograms per hectare, aiding farmers in accurate application of fertilizers and controlling costs.

Nutrient conversion from one state/form to the other is given in the chart

Fertilizer name	Nutrient composition (N:P:K)
DAP	18:46:0
Urea	46:0:0
CAN	21:0:0; 26:0:0
Ammonium sulphate	21:0:0; 24S
NPK	23:23:0; 17:17:17
Mavuno	10:26:10
TSP	0:46:0
SSP	0:18:0
Rock phosphates	0:90:0

From	Multiply by	To get/From	Multiply by	To get
NO ₃	0.226	N	4.426	NO ₃
NH ₃	0.823	N	1.216	NH ₃
NH ₄	0.777	N	1.288	NH ₄
P ₂ O ₅	0.436	P	2.292	P ₂ O ₅
K ₂ O	0.83	K	1.205	K ₂ O
SO ₂	0.500	S	1.998	SO ₂
SO ₄	0.334	S	2.996	SO ₄
SiO ₂	0.468	Si	2.139	SiO ₂
MgO	0.603	Mg	1.658	MgO
CaO	0.715	Ca	1.399	CaO
CaCO ₃	0.560	CaO	1.785	CaCO ₃

Mandate Centre for Potato Research:

KALRO Tigoni

Reference Links – book, journal paper, magazine, brochure, bulletin, fact sheet, web etc.

(<http://www.kalro.org>)

KALRO E-mimi website

Authors	J. Oyoo, P. Pwaiwai, M. Nyongesa,
Contact Details	Kalro.tigoni@kalro.org KALRO Call Center: 0800721741
Editors	Nyabundi K.W., Maina F.W., Mukundi K.T., Maina P., Wanyama H.N. Mbugua D. and Ekadeli J.
Design	Odipo S.N.

