

USE OF ORGANIC MANURE

Addition of organic matter improves the soil in several ways. It improves both the physical structure as well as the chemical composition. Sandy soils are friabilized and their water holding capacity is increased. Clays are made loose and porous. Organic matter also increase nutrient holding capacity of the soil, and thereby improves the conditions for plant growth.

Organic manure can also provide some of the plant nutrients. Because of the low nutrient content compared to artificial fertilizers much larger quantities are required. Also, the missing nutrients will have to be provided. Use of organic manures is encouraged wherever possible.

Locally available organic manures such as cattle and goat dung, poultry manure, farmyard manure, composts and coconut husk ash can be used for manuring coconuts provided they are supplemented with inorganic fertilizers to form a balanced manure mixture to meet the requirements of coconut palms.

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Usually organic manure requires supplementing with one or more inorganic fertilizers. In order to maintain the correct supply of major nutrients using both inorganic and organic fertilizers, numerous combinations are possible. The details are given in Table 1.

All animal dungs can give the nitrogen requirements of the palm. Potassium may be added as ash derived from several organic materials such as wood, coconut husk, butt ends of fronds, paddy husk, citronella grass, salvinia and cinnamon leaves etc.



Apply organic manures into the trench.

Table 1 RATE OF ORGANIC AND INORGANIC MATERIALS FOR SUBSTITUTION (kg/palm/6 months)

Age of the palm	Cow dung (dry)		Goat dung		Poultry manure		Farmyard manure		Composts		Muriate of potash
	NC	SP	NC	SP	NC	SP	NC	SP	NC	SP	
Planting hole	—	11	—	7	—	9	—	11	—	18	—
6—18 months	3	9	2	5	3	7	3	8	4	13	—
18—30 months	5	9	4	5	5	7	5	8	8	13	—
30—42 months	9	11	5	7	7	9	8	10	13	17	—
42—54 months	11	13	7	8	9	11	10	12	17	21	—
54—bearing	13	16	8	9	11	12	12	15	21	25	—
** Adult palms											
—Lateritic gravels and sandy soils		35		18		25		30		50	1
—Loamy soils		30		15		20		25		40	‡
—Soils in dry zone		20		10		15		20		30	1

** Rate is given in kg/palm/year

NC—New clearings

SP—Second Plantations.