

MEASURE YOUR FERTILIZER EASILY

Coconut growers are often faced with difficulties in measuring the correct quantity of fertilizer when a weighing balance is not available. This is a common problem, particularly with small-holders, and it is surprising that the lack of a weighing balance has forced some growers to postpone the application of fertilizer, which has already been purchased.

One way to overcome this problem is to use containers commonly available in the household, such as condensed milk tins, sardine tins, coconut shells, baskets, buckets, bags etc. to measure the fertilizer. We find that these containers can be used to measure fertilizer quite accurately. Tables 1 and 2 provide the weight of different straight fertilizers/mixtures that could be held in a given container or measuring device for inorganics and organics, respectively. The average dimensions of each container are also indicated to standardize the containers.

When using these containers, fertilizers should be filled upto the brim, and should not be compacted. Whilst tins and coconut shells are highly accurate for measuring fertilizer, some variation has been observed in the use of the hand. This could be over-

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come by practising a standard method of use. Although very accurate weights could be obtained with these containers, the amounts indicated in the Tables have been rounded off for practical purposes.

Hence it is now possible to estimate the number of container-full of fertilizer to provide the required dose for a coconut palm. For example, an average coconut shell (approx. 11.5 cm diameter) filled upto the brim could hold about 375 g (13 oz) of the Adult Palm Mixture (APM: 12-6-32). Therefore it is necessary to apply eight (8) coconut shells per palm to provide of 3 kg APM (12-6-32).

The data given in the two tables need to be used as a guide in fertilizer application in small-holdings and home gardens. However, for large coconut plantations it is always important to have a properly prepared measuring device to measure fertilizer accurately and quickly. The most commonly used device is a plastic bucket.

Table 1 - Amount of organic fertilizer held by different containers

Organic manure (air-dried)	Common cane (42 cm diameter; 18 cm height)	Plastic bucket (25 cm diameter; 25 cm height)	Common polythene fertilizer-bag (55 cm width; 77 cm height)
Cow dung	3 1/2	13/4	11 1/2
Goat dung	6	3	14 1/2
Poultry droppings	5 1/2	3 1/4	18
Kitchen ash	6 1/2	3 1/2	28

Table 2 – Amount of Inorganic fertilizer held by different containers
 (Figures rounded off for ease of use; Handful and spoon measurements are given only for reference purpose)

Fertilizer	Coconut Shell (upto brim) Approx, 11.5 cm diameter	Condensed Milk Tin (upto brim) 7.5 cm diameter	Small Sardine Tin (upto brim) 5.5 cm diameter	Big Sardine Tin (upto brim) 7.5 cm diameter	Handful (Medium hand)	Table Spoon (full)
	Mean (g)	Mean (g)	Mean (g)	Mean (g)	Mean (g)	Mean (g)
Young Palm Mixture YPM (13-12-17)	375	300	175	422	225	45
Adult Palm Mixture APM (12-6-32)	375	275	150	400	200	45
Adult Coconut (0-6-32-5)	500	375	200	525	275	65
Urea (46% N)	300	250	125	325	57	30
Ammonium sulphate (20.6% N)	425	325	175	450	125	30
Saphos phosphate (27.5% P ₂ O ₅)	425	350	200	500	250	50
Eppawala rock phosphate (30% P ₂ O ₅)	550	425	225	600	325	70
Triple super phosphate (46% P ₂ O ₅)	425	300	175	425	100	25
Muriate of potash KCl (60% K ₂ O)	425	325	175	475	125	45
Dolomite (20% MgO)	600	475	250	675	400	60
Kieserite (24% MgO)	525	400	225	575	225	40