



HOW TO FERTILIZE PROPERLY

The required amount of fertilizer can be obtained by analyzing the amount of nutrients in the harvested fruits or crop removal and return back to the recommendation rate.

Loss due to other factors and be considered. From the experiments, it has been indicated that 1.5 - 2.0 times the removal needs to be returned, depending on the soil type and previous fertilizer management (Table 2) and should be equally divided into 2 or 3 applications during fruit development



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PITFALLS OF IMPROPER FERTILIZATION

Myth and truth about fertilization

Inappropriate fertilization form farmers often emerge from the belief that a surplus of fertilizers increase longan quality. The truth, however, is that too much fertilizers could hamper tree health and yield in the long run.

Disadvantages of too much fertilizer

- Unnecessary increased costs of production.
- Loss of nutrition balance which could lead to certain nutrient deficiencies.
- Too much N fertilizer reduces longan flowering and quality following $KClO_3$ application.

Disadvantages of too little fertilizer

- Recovery of a tree's health after harvest is slow so vegetative flushing is delayed and nutrient deficiency occurs.
- Decline in yield and quantity.
- Leaves become smaller and could lead to tree decline.



ตารางที่ 2 แสดงปริมาณปุ๋ยที่ควรให้แก่ลำไยในระยะติดผลจนถึงเก็บเกี่ยว (กรัมต่อต้น)

ปริมาณผลผลิตที่คาดว่าจะได้ (กก./ต้น)	สูตรปุ๋ย		
	46-0-0	15-15-15	0-0-60
50	450	480	440
100	900	960	880
200	1,800	1,920	1,800

ตารางที่ 1 แสดงปริมาณปุ๋ยที่ควรให้แก่ลำไยในแต่ละครั้งของการแตกใบ (กรัมต่อต้น)

ต้นพันธุ์ย่อย ทรงกลม(เมตร)	สูตรปุ๋ย		
	46-0-0	15-15-15	0-0-60
1	16	12	9
2	32	23	15
3	75	53	40
4	150	100	80
5	260	180	140
6	430	290	230
7	650	450	370

SUGGESTION

After fertilizing the tree, soil and plant analysis should be carried out to determine the plant and soil's nutrient status, both before and after the fertilizer is added. If the soil's nutrient status is at an appropriate level, no further fertilizing is needed or needed at a reduced rate. This is because the tree will not respond to further fertilizing and thus leads to an unnecessary, wasteful investment. For instance, research clearly shows that longan trees have no further response when the soil's P is higher than 50 - 60 ppm, and K is higher than 100 - 120 ppm. Besides this, any signs of abnormal development should be observed. Leaf analysis will help to increase fertilizer efficiency and reduce costs.

During the present and in the past, many longan farmers fertilize their longan trees by using their past experiences or by gaining knowledge from other farmers. Furthermore, some might be based on beliefs, like P at a high rate will promote good flowering. These types of practices, however, lead to imbalanced soil nutrition and poor tree health.

Nowadays, competition for prices and quality are higher than in the past.

Better, more efficient and accurate fertilizer management is needed.

Research, and soil and plant analysis will play important and significant roles in longan fertilizer management for efficient, modern farming.

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LONGAN FERTILIZER MANAGEMENT

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