



## Ops Tikus in USJ21 Goes "Fowl"

A regular effort to rid the back lanes of commercial shops in USJ21 of rats went "fowl" when members of JKP Zone 3 found live chicken being kept in rubbish compartments.

Volunteers who had spent the morning looking for dead rats in the back lanes sensed something amiss when they heard "clucks" from the rubbish compartment of a convenience store last month.

When JKP Zone 3 councillor Lee Jen Uyin opened the door to the compartment, she was caught by surprise at the sight of more than 10 live chickens in it.

Live chicken according to Lee were not allowed to be kept or slaughtered in convenience shops. She said the matter would be reported to MPSJ and action would be taken on the shop owner for ignoring the bylaws which prohibit the practice.

A total of 44 dead rats were picked up



## Plants & Gardens Subang Jaya

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Everyone's got a Secret Garden somewhere in the little corner of their home. Gardening has opened up new horizons for those who want to put their green fingers to good use. Starting this month, SJ Echo will be featuring useful tips on Plants & Gardens for you. You can also follow our Facebook Group: SJGardens and share your photos and stories.

## Which is Better: Organic or Inorganic (mineral) Fertilisers?

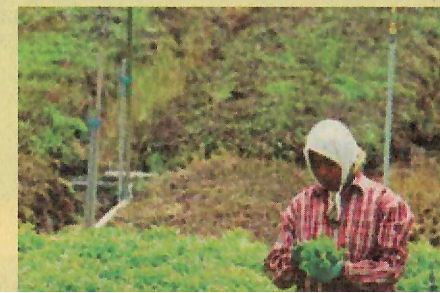
by Christopher Teh Boon Sung, Fac. of Agriculture, Uni. Putra Malaysia, Serdang  
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Organic fertilizers are made from a variety of plant- and animal-derived materials, including agricultural by-products and even safe industrial wastes. Mineral or inorganic fertilizers, on the other hand, are made from simple salts (not to be confused with the table salt we eat), containing essential plant nutrients.

Plants cannot actually differentiate between organic and inorganic fertilizers. What is important is the form of nutrients. Plants can only absorb nutrients in a certain form. Essential plant nutrients like nitrogen (N), for instance, are taken up by the plant only as nitrate or ammonium ions, whereas phosphorus (P) and potassium (K) as orthophosphate and potassium ions, respectively.

The main advantage of mineral fertilizers

is that they contain lower amounts of nutrients N and P (particularly the latter) than inorganic fertilizers. Organic fertilizers, however, supply carbon (C), an essential ingredient for healthy soils, whereas inorganic fertilizers do not have C. Addition of C, via organic sources such as organic fertilizers, into the soil will improve virtually all soil properties.





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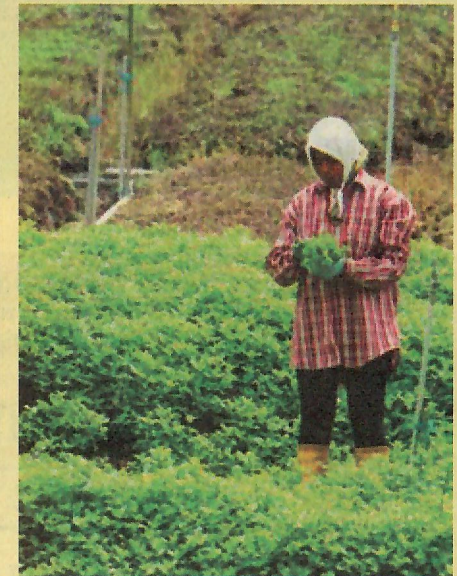
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The main advantage of mineral fertilizers over organic fertilizers are the nutrients in the mineral fertilizers are immediately available to the plants to absorb. This means when we apply inorganic fertilizers to our plants, the applied nutrients can be immediately absorbed by the plants – but this is not the case for the nutrients in the organic fertilizers. The organic fertilizers first need to be broken down by the soil microorganisms to release the nutrients before they can be absorbed by the plants – and this is a slow and gradual process. This additional step means our plants may not get sufficient nutrients at any one time.

However, the advantage of inorganic fertilizers is also their weakness. Because their nutrients are immediately available to the plants, the nutrients in inorganic fertilizers are also easily lost. Only 20 to 40 per cent of applied inorganic fertilizers are used by the plants; the rest is wasted, often by evaporation or being carried away by excessive water. But soils applied with organic fertilizers are typically able to store more nutrients because the nutrients in the organic fertilizers are released gradually; thus, avoiding large instantaneous losses.

Inorganic fertilizers are formulated to contain large amounts of nutrients and in the exact or required amount. But the nutrient content in organic fertilizers are not only lower than in inorganic fertilizers, but also their nutrient composition will fluctuate, even if taken from the same organic source. One of the biggest disadvantages

lower amounts of nutrients N and P (particularly the latter) than inorganic fertilizers. Organic fertilizers, however, supply carbon (C), an essential ingredient for healthy soils, whereas inorganic fertilizers do not have C. Addition of C, via organic sources such as organic fertilizers, into the soil will improve virtually all soil properties.



Agriculturists recognize that both organic and inorganic fertilizers have their individual strengths and weaknesses. So, our question isn't which is fertilizer type is better or should be used. Instead, it is determining our plant exact nutrient requirements: what nutrients our plants need, how much they need them, and when to give them. Agriculturists recommend the use of both organic and inorganic fertilizers, one compensating for the other's weaknesses.

Increasingly more organic fertilizers today, however, are enhanced by the addition of microbial inoculants that contain either living or dormant microorganisms such as bacteria and fungi. These biofertilizers aim to overcome some of organic fertilizers' weaknesses by adding microorganisms that can increase the amount of N in the organic fertilizers and increase the plant absorption of nutrients and water. Some biofertilizers even containing microorganisms that act as biopesticides against plant pathogens.



# Recycle & Earn

**RESIDENTS** of USJ1 Angsana can now participate in recycling efforts and earn some side income from the initiative.

MPSJ JKP Zone 4 councillor Kamarul Hisham said efforts to encourage residents from Angsana flats to recycle their unwanted items had started and the response was encouraging.

"We have set up a booth to collect used cooking oil and also collect newspapers,

plastic and unwanted electrical items."

"Residents who bring them in are paid for the items they bring in. This way, they are rewarded for their efforts and encourages them to bring the items in to us instead of indiscriminately dumping it," he said.

Kamarul said the initiative was in partnership with MPSJ and would continue in the mid to long term.