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(ENGLISH)

BIOFERTILIZATION

EASIEST AND EFFICIENT APPROACH OF THE ORGANIC FETILIZER PRODUCTION, THE BEST WAY OF INCREASING AGRICULTURAL PRODUCTION AT WILL WITHOUT DISTURBING THE BIOLOGICAL STATE OF THE GROUND

The beneficial effects of this approach

It is by all means, the contribution to food security, the sequestration of $C0^2$ of the troposphere throuh leaves surface area increament ;

The economic aspects is the followin :

1) better food production compared to that derived fromthe application of chemical and chemical fertilizers,
2) obtention of nutritive products not affected by pesticides.

Aerobic approach of 3 (three) biofertilizers preparation

1-The composition of the selected biofertilizers

Different vegetation componets		
Bio A	Bio B	Bio C
Colocasia	Mango leaves	Colocasia
Jacinthe d'eau	Avocado leaves	Jacinthe d'eau
Albizzia lebeck	Bannana tree leaves	Pueraria javanica
Leucaena leucocephala	Terminalia leaves	Mango leaves
Pueraria javanica	Hyparhenia leaves	Avocado leaves

Remark

The main difference between those proposed biofertilizers relies on the C/N ratio,
The Bio A shall mainly done with leaves having a low C/N ratio, whearea,
Bio B shall contain the leaves with high C/N ration and
the Bio C shall be prepared with leaves with high and low C/N ratio.

2-Preparation procedure

After collecting the above mentionned leaves, they must be pounded in a mortar and introduced later on in the appropriated container.

2.1-For a 25 liters of the biofertilizer container, we have to pound 1 kg of each selected leaves and add 1kg of chicken or goats'droppings ; for a 100 liters of the container, we must use 4 Kg of the selected leaves and 5 kg of droppings.

2.2-Quantity of pure water to be added /container
a) for a 25 liters of the container, we must use 20 liters of pure water
b) for a 100 liters of the container, we must use 80 liters of pure water.

2.3-Incubation duration: 45 days

2.4-Required conservation method:

The produced liquid is to be sieved and stored in a very cool place against sunlight using the same conservation method generally used for any medical product.

2.5-Additional activities needed on daily basis : every day, we have to mix the components of the container with a wooden stick, after that, the container has to be closed.
The produced methane gaz during this process, is to be directed and collected in another container closed by, this colleced biogaz can be used for cooking purpose or for rural electricity use.

3-Application procedure

3.1-For spray application : 200 cc of the concentrated biofertilizer are to be added with 1800 cc of pure water in a 2 liters of the sprat container

3.2-For soil incorporation : 400 cc of the concentrated biofertilizer are to be added with 1800 cc of pure water in a 2 liters of the sprat container The product is to be incorporated at 5 cm depth around the stem with a circumference having 10 cm for the R value.

Remark :
Best results in terms of leafarea development and yields are obtained by combining the 2 application methods.

3.3-The crops' protection against the bio-aggressors (insects in particular)

The crop protection against insects and other flying or crawling insects can be easily obtained by just spraying a tea prepared with Tithonia diversifolia leaves ; lemon grass combined with a juice of hot pepper.
The amount to be used for each componet for a 2 liters container is the following :

a)-800 cc of Tithonia, 800 cc of Lemon grass tea and 400 cc of hot pepper juice ,
b)-the application rate is : 2 times/week.

4-The required equipment

Heading	Nb	remark
100 liters container	3	
25 liters container	3	
Gaz collector of 10 liters	3	These must be connected with the 100 liters container
Gaz collector of 5 liters	3	These must be connected with the 25 liters container