



Department of Science and Technology
Philippine Council for Agriculture, Aquatic and Natural
Resources Research and Development

Urban Gardening:

GROW YOUR VEGETABLES THE EPP WAY



What is EPP?

The Enriched Potting Preparation (EPP) technology provides urban families with healthy and pesticide-free vegetables, herbs, and ornamental plants. It is an easy and affordable way of growing plants right in the comfort of everyone's home and in communities with little space for gardening.



What plants can be grown using the EPP technology?

Type	Variety
Vegetables	lettuce, pechay, mustard, tomato, eggplant, bittergourd, 'okra,' ginger, beans, 'kangkong,' sweetpotato/'kamote' tops, 'saluyot,' spring onion, hot pepper, sweet pepper, Chinese celery, cucumber, kale, 'kinchay,' spinach
Herbs	basil, mint, parsley, sage, rosemary, thyme, wansoy, coriander, kaffir lime, tarragon, stevia, gotu kola, oregano, gynura, mollocan
Ornamentals	Euphorbia, daisy, Florida beauty, impatiens, cactus, jasmine

How to grow vegetables, herbs, and ornamentals the EPP way

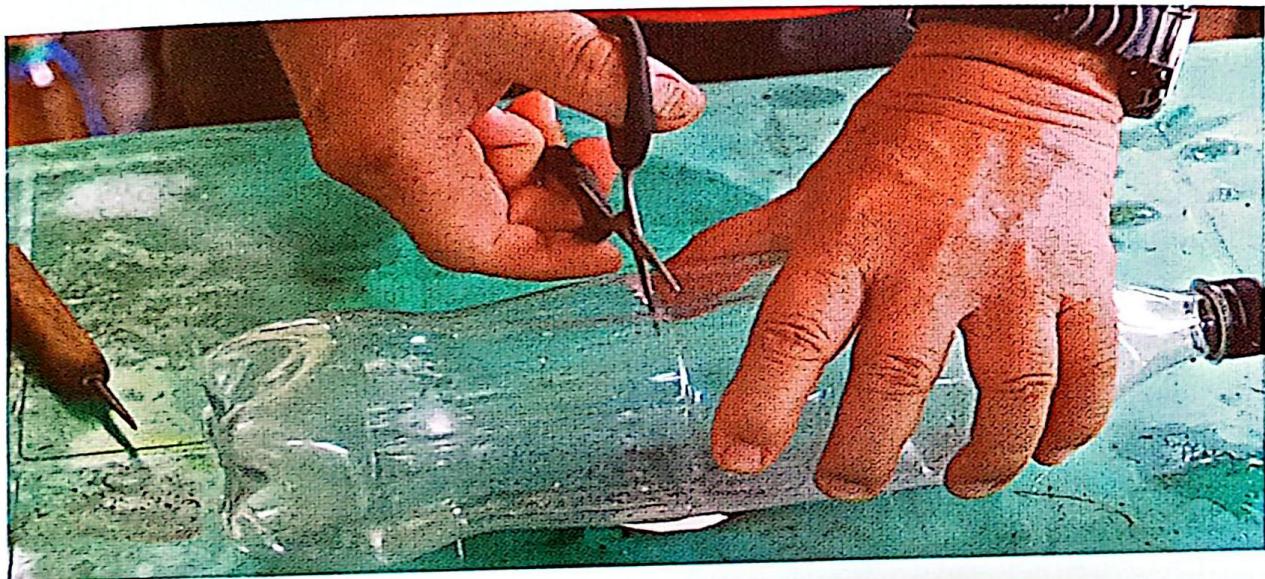
Materials needed:

- 1.5-liter (L) empty plastic softdrink bottle
- potting medium
- compost soil extract (CSE)
- nylon string

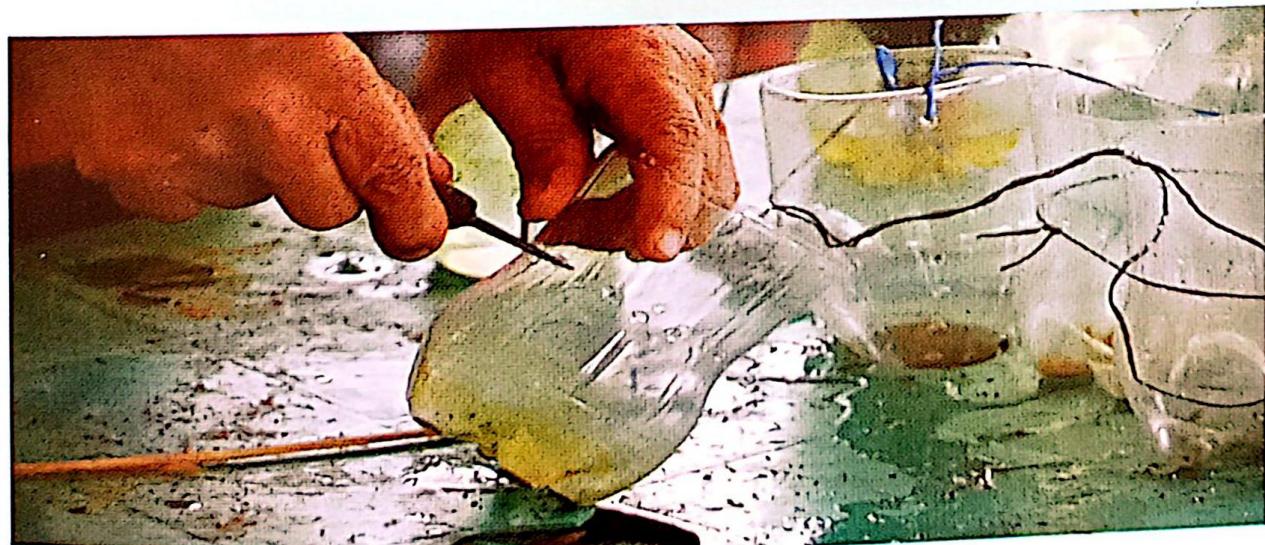
Procedure:

Preparing the plastic-bottle container

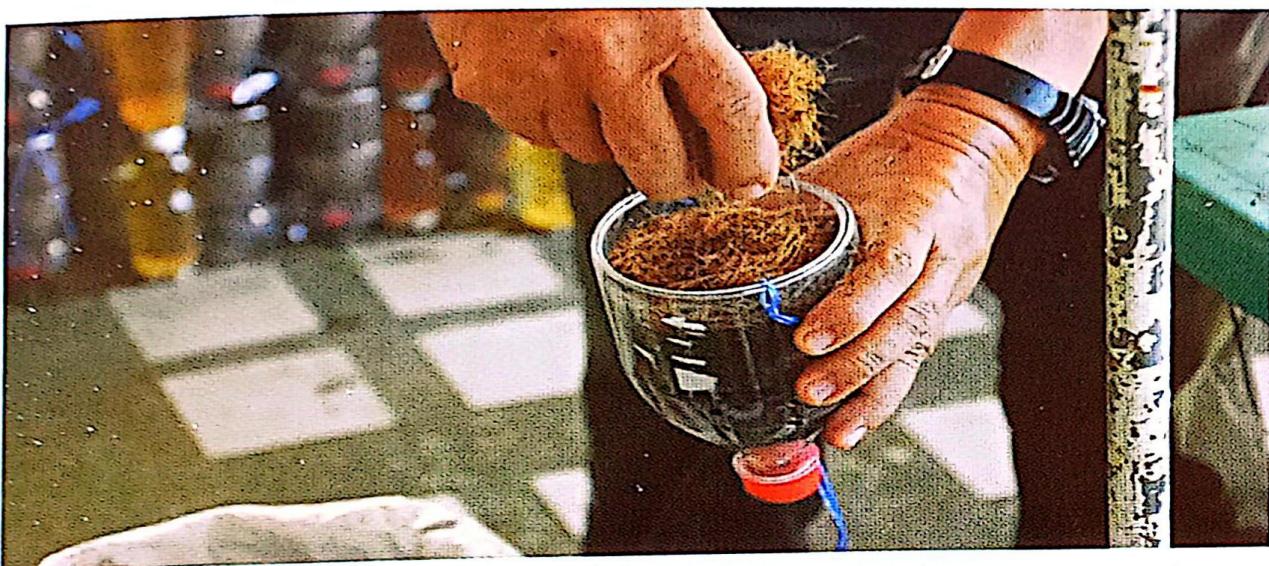
1. Cut the plastic bottles in half.



2. Put small holes on the sides of both top and bottom half of the bottle for aeration and drainage of excess water.

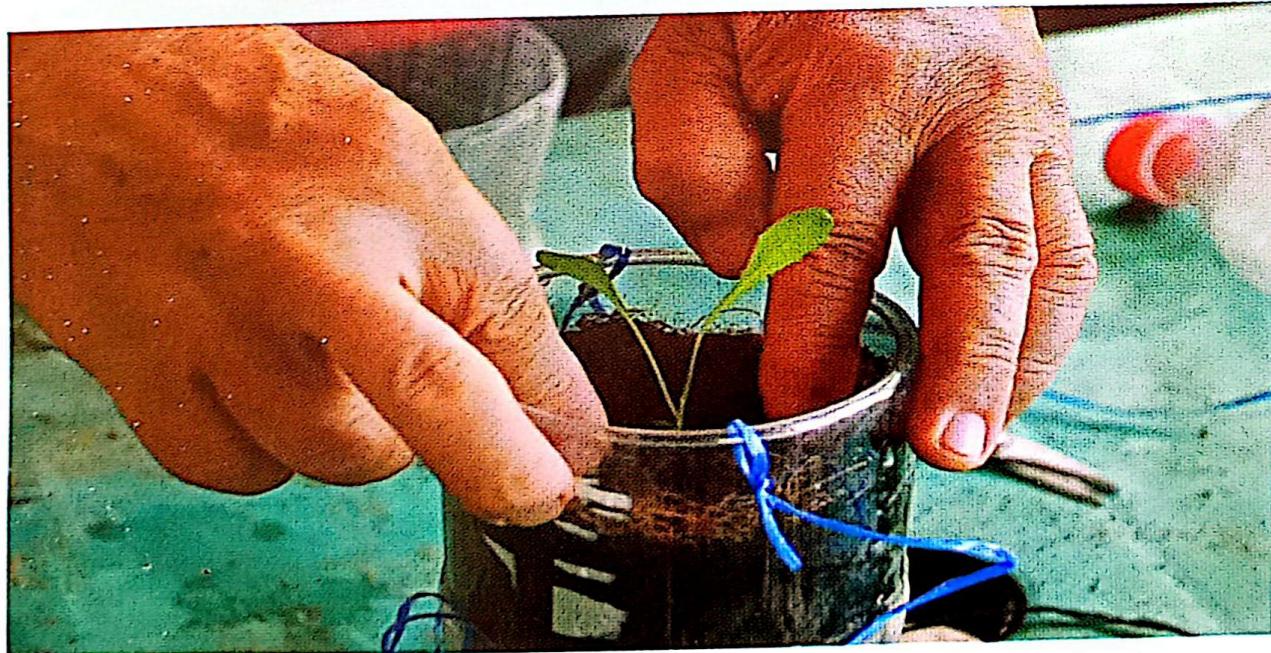


3. Place the potting medium inside the inverted top half with the bottle cap.
4. Use the bottom half as a stand for the top half to collect and reserve excess water for plant's reuse.



Sowing the seeds

1. Sow 2 or more seeds and cover with 1 millimeter (mm) of the potting medium.



2. Remove the upper part and wet the potting medium by dipping the plastic bottle container into a pail of water.
3. Put back the container by putting bottom part on top of the soil surface.
4. Place the EPP in shaded area until seeds germinate, then place it where seeds can receive morning sunshine.

5. If needed, transplant extra seedlings to other EPP.
6. Place EPP where plant can receive at least 2 hours of full sunlight.

Watering the plants

Water the plants three times a week for seedlings or once a day for mature plants by dipping the EPP vessel into a pail of water or by sprinkling until the soil is fully wet.



Fertilizing using CSE

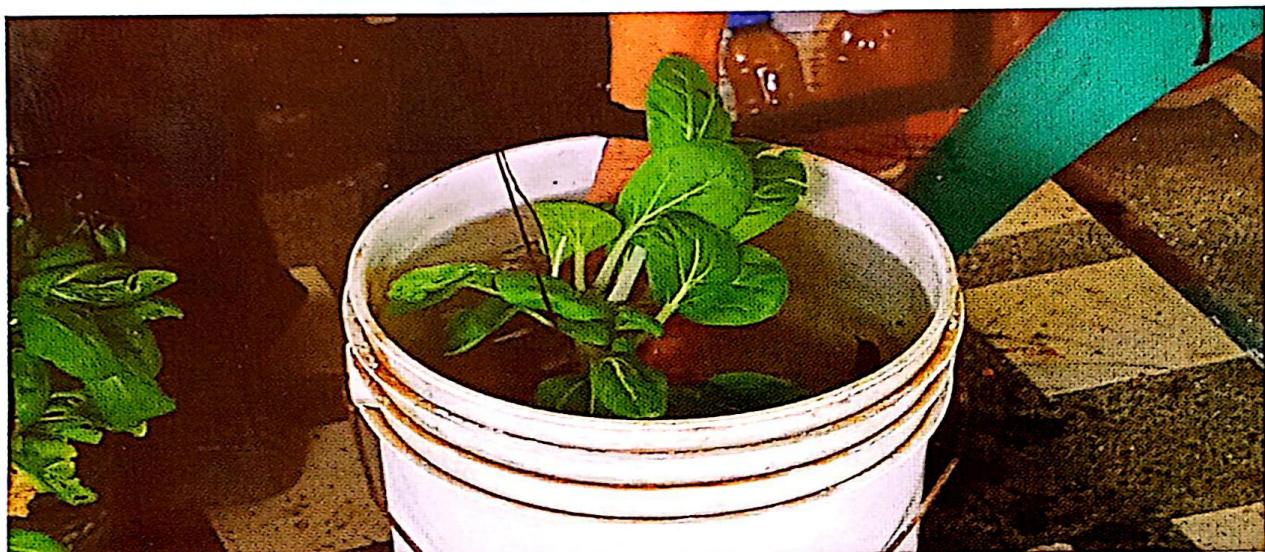
1. Dilute CSE in a ratio of five tablespoons of CSE to 1 L of water.



2. Water the plant with about 100 milliliters (mL) of the diluted solution once a week during seedling stage and twice a week as the plant matures.



3. For pest control, dip the whole EPP plant into a clean pail of water for 15 minutes to 1 hour, depending on the severity of the pest infection.



4. For green leafy vegetables such as pechay and lettuce, harvest leaves using scissors. Leave the younger leaves and let them grow until ready for the next harvest.



What are the benefits of EPP?

- Plants are easier to care for and tend.
- There is a continued harvest of fresh, succulent leafy vegetables.
- Vegetables can be grown 6 cycles/year.
- It is most appropriate in urban areas.
- Lateral and vertical expansion of planting can be done.
- It helps in waste recycling efforts of the community as it uses non-biodegradable plastic bottles.
- The organic potting medium is porous, nutrient-rich, and free from toxic elements.
- It can be hung or set to stand.
- It is moveable and easy to transport during heavy rains or if there is too much heat.



Costing

Item	Price (P)
EPP	25
CSE (320 mL)	25
CSE (500 mL)	30
EPP triplet	100

An EPP set (with CSE, potting medium, seeds, and seedling) can be purchased at:

- 28 Bonita St. Jubilee Ville, Masaya Bay, Laguna
- AANI Weekend Market, FTI, Taguig City

For seminars and trainings on how
to make EPP, please contact:

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