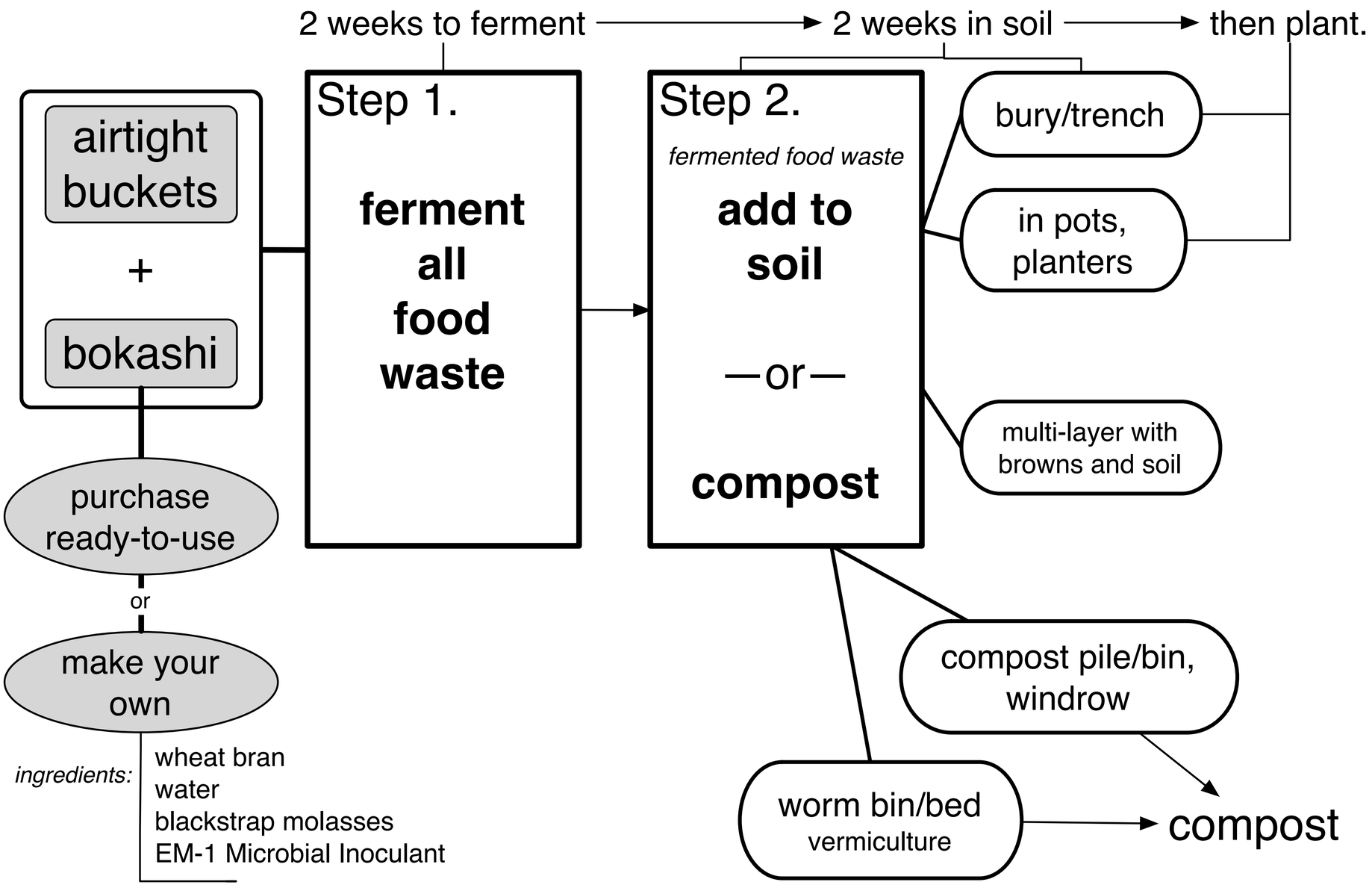
bokashi composting

bokashi = fermented organic matter

recyclefoodwaste.org

The bokashi method
of recycling food waste



How to make bokashi

blackstrap molasses

1% to water

EM•1

1% to water

organic material

wheat bran (1 cup water/lb)

mix to ~30% moisture

(squeeze test: sticks together, no drip)

pack airtight to ferment

after 2 weeks, ready to use

"wheat bran bokashi"

St. Mary's Urban Farm, 521 W 126th St Harlem NY, Nov. 2013

Sprinkling the microbes

as bokashi bran onto food waste

Spraying the microbes

Mixture: 1/8 blackstrap molasses + 3/8 Activated EM + 4/8 water

Spraying the microbes

Spraying using a hose-end sprayer

Making the bokashi spray

Mist spray bottle: 16 fl oz clear bottle *(from sks-bottle.com)*

Video: link at recyclefoodwaste.org

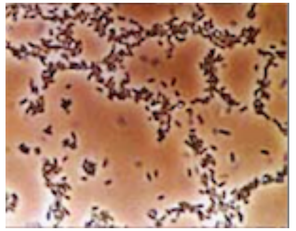
Effective Microorganisms

EM, EM-1

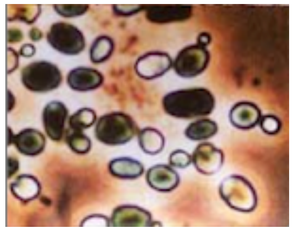
Combination of 3 groups of microbes
with the dominant species of each group

Microbes function differently
when combined

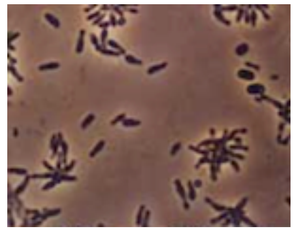
These microbes exist most anywhere,
but are not normally found together.



lactic acid bacteria
(various *Lactobacillus* spp.)



yeast
(*Saccharomyces cerevisiae*)



phototrophic bacteria
(*Rhodopseudomonas palustris*)

When Teruo Higa discovered (1982) how effective
this combination was, he needed to refer to this grouping
by a name, so he called it Effective Microorganisms or EM.

And EM-1 is the actual liquid
containing these 3 groups of microbes.

Images: EM Research Organization

Activated EM ingredients

Fermentation container: **2-Liter** PETE bottle (soda bottle)

Add 2 cups **water**

Add heaping tablespoon of **sea salt**; swirl bottle

Add 5% **blackstrap molasses** 100 ml; swirl bottle

Add 5% **EM-1**, 100 ml; swirl bottle

Add water to 1 inch below neck of the bottle

Squeeze out air when closing cap.

2 weeks to ferment. Room temperature. When pressure (carbonation), release gas.

See video, “Making Activated EM (in the garden),” link at recyclefoodwaste.org

bokashi composting

Step 1

ferment food waste

Step 2

as soil amendment

El Sol Brillante Community Garden
and the Children's Garden
East 12th St, Ave A & B
East Village/Lower East Side
New York, NY