

How to Take of your Seeds

*Learning **A**dvocacy for **F**ood, **A**griculture, **N**ature and **G**rowth*



LAFANG WEBINAR SERIES

5:00 PM - 6:00 PM

- A webinar series with our friends at Global Seed Savers Philippines in line with our joint commitment to lower our Carbon Footprint score!



June 8 | Episode 1: Source Sustainable Solutions

June 15 | Episode 2: Basic Seed Fitness

June 22 | Episode 3: The Seed Sovereignty Movement

June 24 | Episode 4: Turn Waste into Valuable Resources

Meet our speakers



Karen Lee Hizola, Executive Director

- Karen joined the Global Seed Savers team in 2016.
- An Electronics Engineer by profession but an artist and environmentalist by passion.
- In 2012, she had her Introduction to Permaculture and the following year pursued a more in depth Permaculture Design Course in Cebu, Philippines.
- Karen spends her time working as a Graphic Designer and leading Global Seed Savers Philippines.



Efrenlito Cabbigat, Program Manager

- Bachelor's of Social Work from Saint Louis University in Baguio City
- Masters of Social Work at the University of Sydney in Australia.
- Social worker by profession and has held a variety of roles throughout his career.
- Worked on child protection services as a Community Mobilization Officer at the International Justice Mission in Metro Manila.
- A big motivator of Efren's involvement in GSSP is his experience as a son of a farmer. He is passionate about work that gives voice and agency to small-holder farmers.



***Episode 1:
Source Sustainable Solutions***



- Key Steps to Starting an Urban Garden
- Soil and Other Growing Media
- Basic Plant and Soil Nutrition
- Herbs and Microgreens



I. Key Steps to Starting an Urban Garden

- c - cycle or life cycle of plants
- o - observation of your space
- m - materials you already have
- E - eat; plant what you enjoy eating
- T - time you can allot
- s - size of plants



- Soil
- Soil-less Potting Mix
- Water
- Air



Photo from [gardeningkr](#)



Photo from the gardenknowhow.com

- What is soil?
- When is soil used in urban gardening?



Photo from the nichenursery.blogspot.com

- What are soil-less media?
- Good combinations of soil-less media



Photo from Green Gold Farms, Pampanga



III. Plant and Soil Nutrition

Fish Amino Acid

*Equal parts fish/fish entrails and molasses
or brown sugar.*

Ferment for at least 20 days.

2 tbsps for every liter of water.

Spray on roots NOT on leaves.



Photo from thelittlewormfarm.com

Fermented Plant Juice

For every 1 part of chopped up plant leaves, use 1/2 part of molasses or brown sugar.

Ferment for at least two weeks. May be fermented for up to one month.

Use 2 tbsps for every liter of water.

Spray on plant for growth. Used mostly on leafy greens.



Photo from agriculture.com.ph

Fermented Fruit Juice

Equal parts of chopped up fruit and molasses or brown sugar.

Ferment for at least two weeks. May be fermented for up to one month.

Use 2 tbsps for every liter of water.

Spray on plant flowers to encourage fruit production.



Photo from Wikipedia



Photo from Wikipedia

IV. Microgreens

Propagation and Care

- Days-old plants
- Can be grown in different media
- Cool dark and moist growing media
- Fine soil is better than clumpy soil



- ✦ Depending on the medium used and other factors, water might need to be reapplied once or twice a day. Always use clean water.
- ✦ Ruffle the leaves to remove seed hulls.
- ✦ When to trim the leafy greens depends on preference.
- ✦ Expose the microgreens to sunlight to turn the leaves green.

Herbs are flowering or leafy green parts of a plant that are used to enhance the taste of a dish but is not used as the main part.

Some herbs are used for their medicinal properties.



Take cuttings from the greener/younger parts of the plant.

Cut the bottom part of the stem, diagonally. Make sure you don't cut through a node.



- Grow cuttings indoors first
- Choose and use water wisely
- Experiment
- Be adventurous but forgiving



Urban Gardening

Inspiration



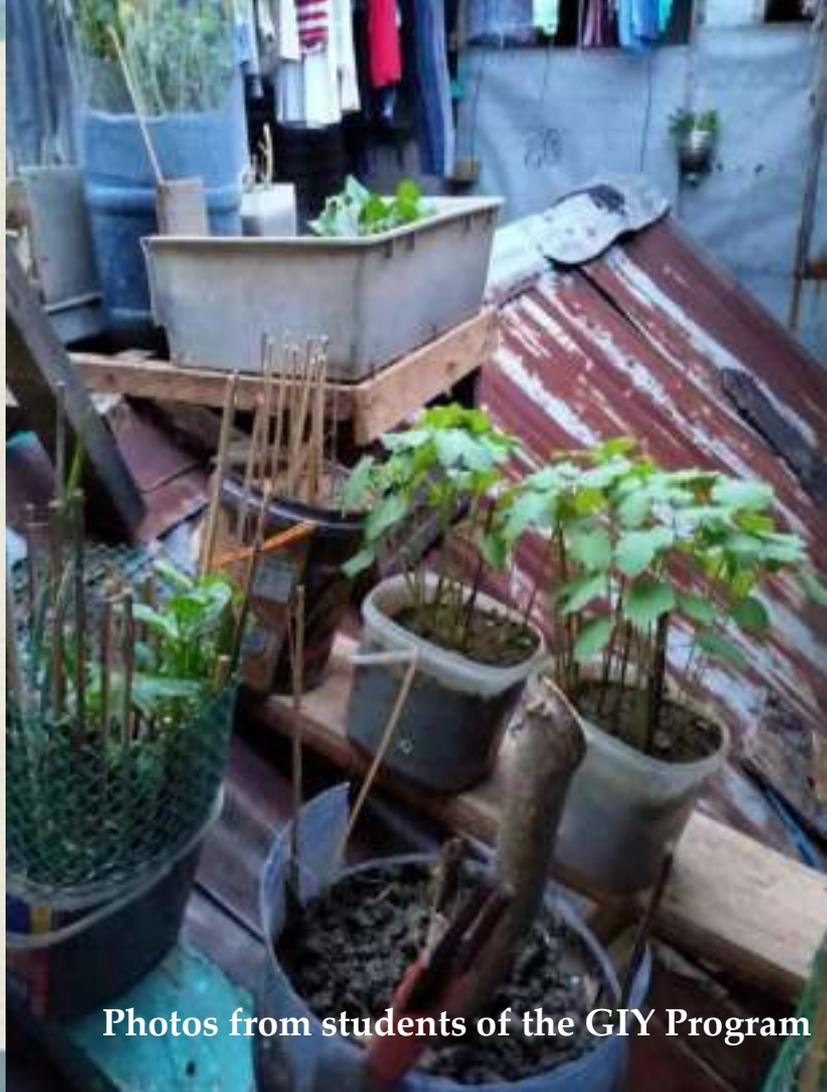
Photo from gardeningknowhow.com



Photo from containergardening.wordpress.com



Photo from agriculture.com.ph



Photos from students of the GIY Program



**HERE'S TO THE CRAZY ONES,
THE MISFITS, THE REBELS, THE TROUBLEMAKERS,
THE ROUND PEGS IN THE SQUARE HOLES,
THE ONES WHO SEE THINGS DIFFERENTLY.
THEY'RE NOT FOND OF RULES,
AND THEY HAVE NO RESPECT FOR THE STATUS QUO.
YOU CAN QUOTE THEM, DISAGREE WITH THEM, GLORIFY OR VILIFY THEM,
ABOUT THE ONLY THING YOU CAN'T DO IS IGNORE THEM.
BECAUSE THEY CHANGE THINGS.
THEY PUSH THE HUMAN RACE FORWARD.
AND WHILE SOME MAY SEE THEM AS THE CRAZY ONES,
WE SEE GENIUS.
BECAUSE THE ONES WHO ARE CRAZY ENOUGH TO THINK
THEY CAN CHANGE THE WORLD
ARE THE ONES WHO DO.**

STEVE JOBS
THURSDAY, OCT. 2014



Episode 2:
Basic Seed Fitness
Extraction, Drying and Storage



Definition of Terms

- Heirloom
- Landrace
- Indigenous
- F1
- Treated Seeds
- Open pollinated
- Variety and Cultivar
- GMO Seeds - transgenic and cisgenic



Wet Process with Fermentation

Wet process with fermentation ensures that the pulp that covers the seeds are removed. Commonly used for tomatoes and cucumber.



Photo from Seed to Seed



Tomato seeds fermenting



Should be kept away from direct sunlight and covered with a light gauze or porous paper.



Wet Process with Fermentation



Wet Process without Fermentation

Wet process without
fermentation.
Commonly used for
melons,
watermelons and
squash.



Photo from Seed to Seed



Wash using a colander or sieve.



Separate seeds from the flesh of the fruit.



Seeds that float are sterile and should be removed.



Seeds at the bottom are viable.



Dry Process



Harvest the plants when they are almost dry.



If weather is not good and the plants are almost ready for harvesting, cut the main stem and store in a dry place.



Seeds are ready for harvesting when the pods turn a light brown or beige color.



Separate seeds from pods by stomping, shaking, rolling something heavy over them.



Drying and Sorting



Separate the seeds that look different.



Use a screen to separate seeds.



Use a screen to separate particles.



Wind, breath and winnowing may be used to separate chaff from seeds.



Use wind for separating chaff from seeds.



Use machines for removing chaff.

***Episode 3:
The Seed Sovereignty
Movement***





SEEDS

Seed Sovereignty, Fragile Food Systems, Interconnectedness



I. Understanding Seeds

What are seeds?



II. Seed Sovereignty

Why Save Seeds?

“includes the farmer's rights to save, breed and exchange seeds, to have access to diverse open source seeds which can be saved - and which are not patented, genetically modified, owned or controlled by emerging seed giants. It is based on reclaiming seeds and biodiversity as commons and public good.”

~Vandana Shiva

A. Biodiversity Conservation

3.8 seconds

*Current and Background
Extinction Rates*



B. Culture

Buri, Is-is,

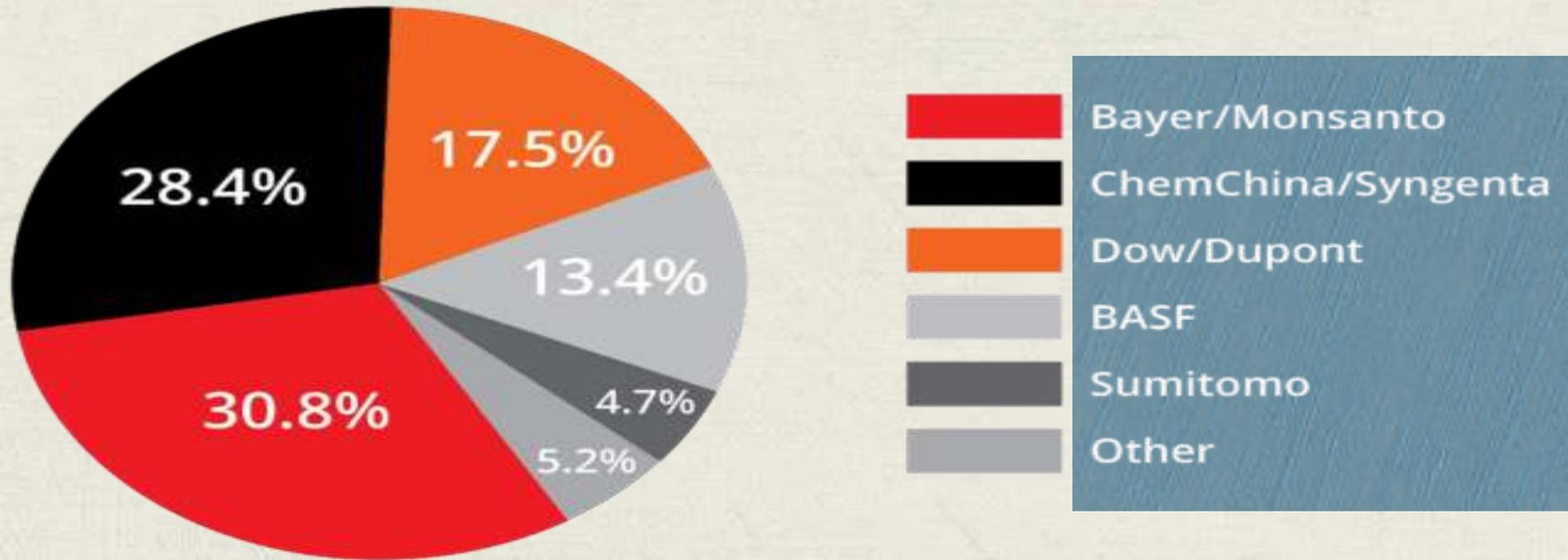




C. Seed Companies

Who owns seeds?

Chemical Companies Market Share in Agriculture





III. Fragile Food Systems

Why Talk About Them Now?

Post-harvest Loss

>32%

1. High Temperature
2. Water loss
3. Physical Damage and Decay
4. Inadequate Drying and Storage
5. Transport of Food Outside of Communities



Food Distribution Systems

Food Supply Chain
Fragile Systems
The Quinoa Story



The Philippines and GMOs

#1 in SEA

#12 in the World

*What does this mean for our
biodiversity? For our food
systems?*



“You do not rise to the level of your goals.
You fall to the level of your systems.”

—*James Clear*



IV. Food Security

Why Should We Care?

Who Feeds the World?

Smallholder farmers
Industrial Agriculture



Seed Libraries

*Seed Libraries v. Seed Banks
Seeds in the Hands of Farmers*

*Seeds SHOULD be in the
HANDS of FARMERS.*





Seed Bank: Svalbard in Norway



Our Seed Library in Benguet

- Promote permaculture, urban gardening
- Encourage seed saving in all sectors possible
- Work with partners to open more seed libraries
- Make food security, nature-based and/or nature-positive economies the default and not an afterthought



VII. Interconnectedness and Inter-becoming

Stories from Tom Chi

- Daily cycle exchange is 7%.
- In as little as 2 weeks, you will have exchanged as much as 98% of you.
- The air you are breathing now was literally on the other side of the planet 4-5 days ago. From moment to moment, we are made of immortal stuff.
- Every exchange feeds another life form or another part of this planet and of the universe. That's how much we are interconnected.



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