

# Fermented Plant Juice (FPJ)



Cho Global Natural Farming(CGNF)



# Fermented Plant Juice (FPJ)

- A fermented extract of the plants.
- Helps crops to absorb nutrients directly for growing healthy and enabling their potentiality.





# Fermented Plant Juice (FPJ)

## 1. Origin of FPJ

- The 'KIMCHI' soup



## 2. Principles of FPJ

### • The process of fermentation

#### 1) The recognition of' 'each other'

(translator's note: between microbes and ingredients)

#### 2) Harmony

#### 3) Fermentation

#### 4) Affection (stabilization)

#### 5) Producing Natural Farming materials.

fill up 2/3 of the jar with materials, and leave 1/3 of the space for that 3 vitality forces (water, air, and heat)



### **3. What to collect**

**(1) Plants with energy**

**(2) Fast-growing and vigorous plants**

**(3) Materials should be in season**

**(4) FPJ from the same crop**

## 4. Characteristics of each material

### ● Mugwort (*Artemisiaprinceps*)

- Snap the tender parts which contain the growing point.
- Pick parts wet with dew.
- The amount of extracted juice is slightly different depending on the seasons (spring>fall>summer).
- Avoid yellowish growth points.
- In general, mugwort produces little juice.





## ● Dropwort (*Oenanthe javanica*)

- FPJ is more effective when created from dropwort that are harvested from the winter to May.
- Spring is the best season for making dropwort FPJ.
- Cut dropwort in pieces of about 2in in length.
- Dropwort has plenty of juice, which accelerates the process of fermentation.
- Because dropwort produces a lot of juice, add more brown sugar when keeping dropwort FPJ in storage.



## ● Bamboo shoot (*Phyllostachys spp*)

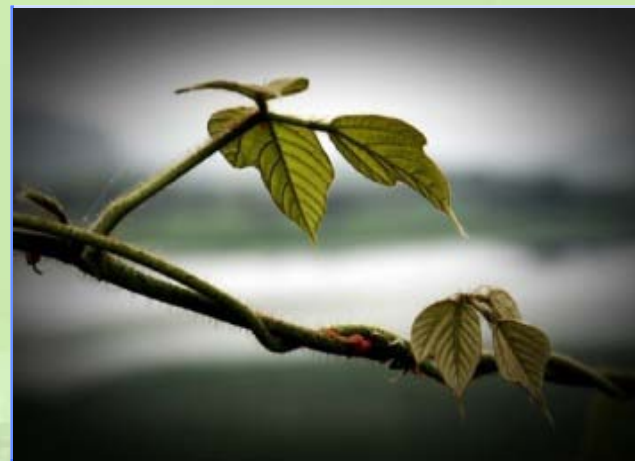
- Pick thick and short shoots.
- Cut shoots into small pieces without peeling off skin  
(Do peel off the skin, when it becomes brownish)
- Ferments fast due to the plentiful juice. (About 5 days)
- When bamboo shoots are soaked too long, white molds may occur due to the abnormally fast fermentation





## ● Arrowroot or kudzu vine (*Pueraria lobata*)

- Pick about 5.9in–long vines which sprout newly in the spring.
- In the summer, collect the soft part of the vine and the light-colored leaves from the upper part of the vine.
- Ferments fast due to the plentiful juice. (About 5 days)
- When bamboo shoots are soaked too long, white molds may occur through the abnormally fast fermentation.



## ● Fruit of the cedar (*Cryptomeria japonica*)

- Cedar is often used as windbreakers in 'Jeju Island' (translator's note: the biggest island in Korea).  
A flow of sap oozes out from the tree in the end of June. This is the time optimal time for harvesting its fruits.
- Cedar has 'chi', so when a small amount of the FPJ made from the cedar is mixed with other FPJs, it will become a very effective reinforcing agent.





## ● Fruit of the chocolate vine (five-leave Akebia)(*Akebiaquinata*)

- Pick immature fruits of the chocolate vine in September It is good to collect when the fruit is immature, because matured fruits only have a small amount of juice.
- Fruits from the chocolate vine entwining a lacquer tree (*Toxicodendron vernicifluum*) are even better.



## ● Seaweeds

- Effective for a plant's growth.
- Reinforces the color of fruit.
- Use a light stone weight to press down on brown seaweed (*Undaria pinnatifida*), because the juice of brown seaweed can be extracted faster than others.





## ● Ripe fruits with no commercial value

- FPJ of ripe fruits is called fruit enzyme
- Divide a fruit into four parts (don't use as a whole)
- It is good to use FPJ which has matured for 1 year. Apply this FPJ to the plant in its late reproductive period

## ● Flower of the false acacia (black locust) (*Robiniapseudo acacia*)

- The best time for collecting flowers is when they begin to bloom, just before bees visit to pick honey.
- Use the same amount of brown sugar as the amount of flowers, because they have a lot of moisture.
- Flowers which smell strong are more effective.





## ● ‘Child liquid’

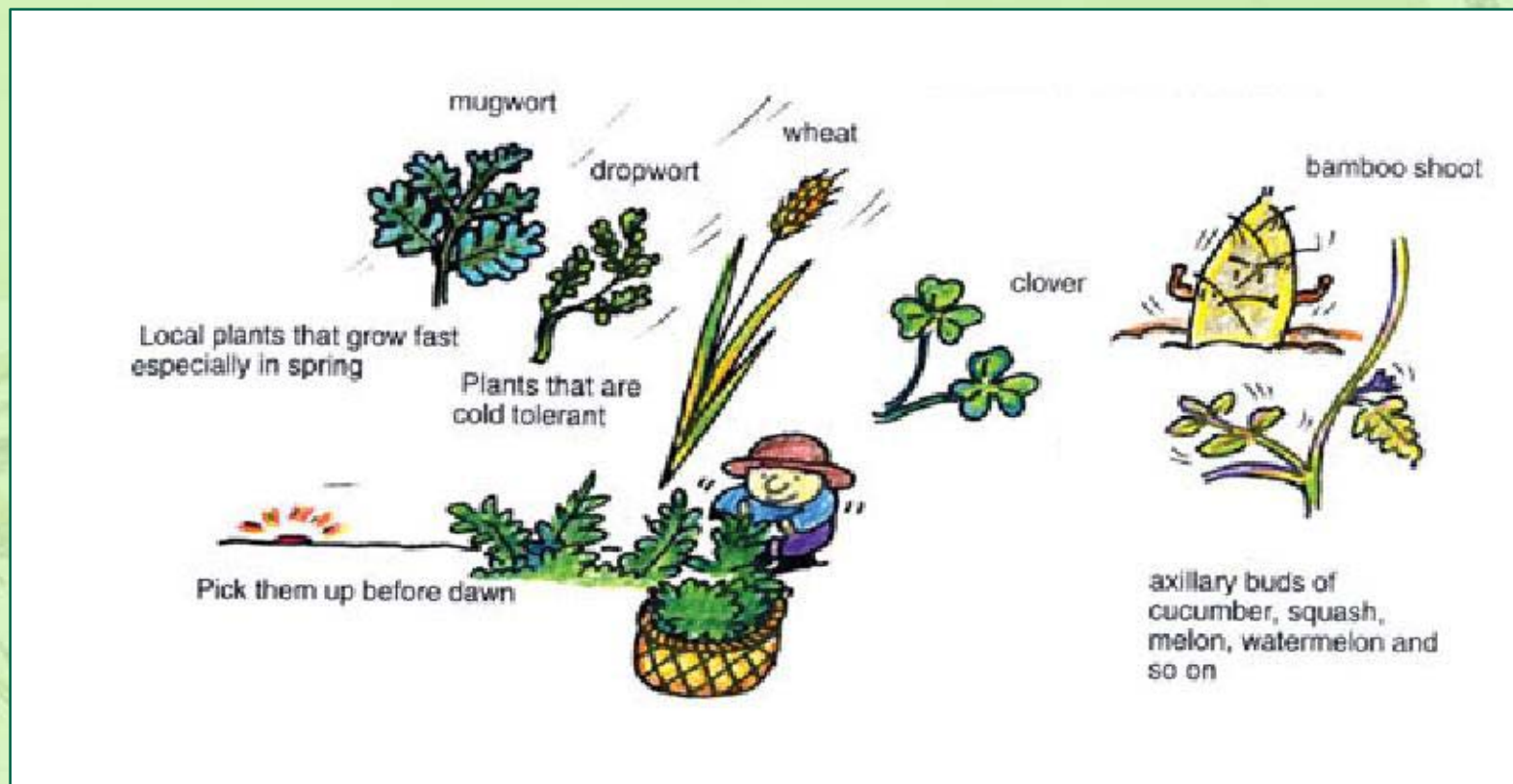
- Use thinned-out fruit (young fruit) and the auxiliary bud of general crops

## 5. When to collect materials

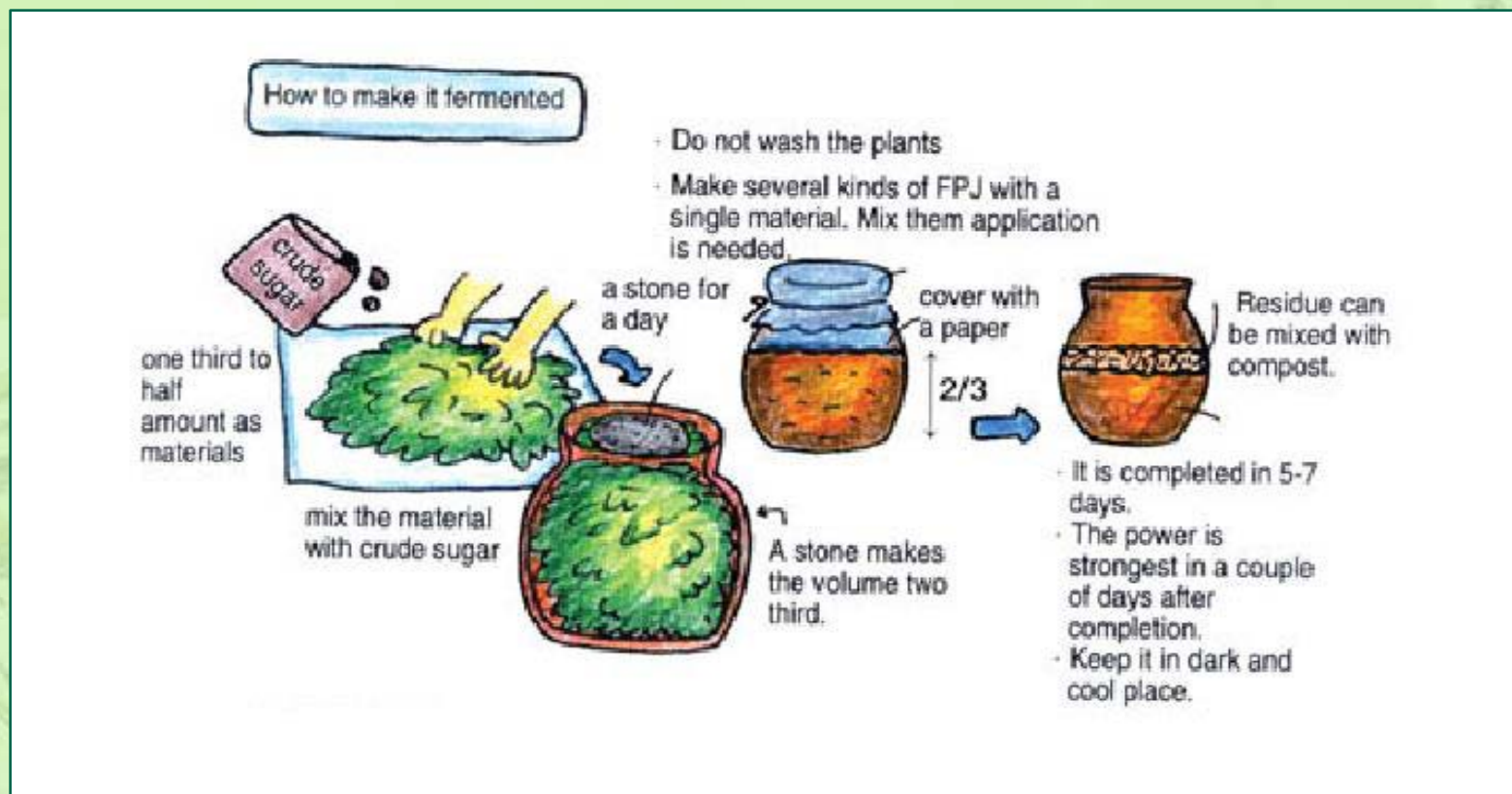
- (1) Just before sunrise
- (2) Quickly snap the growing points
- (3) Special attention



## 6. How to make FPJ

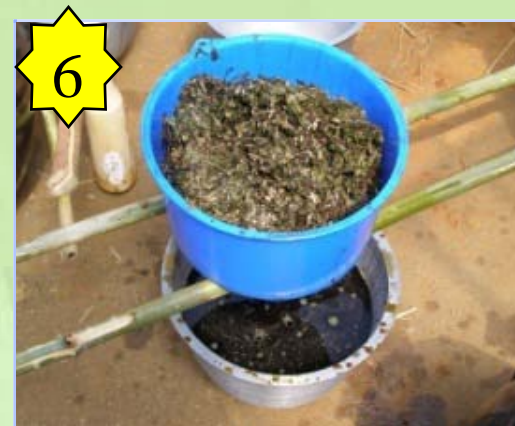


## 6. How to make FPJ





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1. Prepare ingredient with dew on it
2. If the ingredient is an irregular size, cut it into about 2in size.
3. The ingredient with brown sugar in a 1:1 ratio (weight)
4. Fill the jar with enough brown sugar to cover the top
5. Fermentation process
6. After fermentation is completed, surely filtering it for preserve.

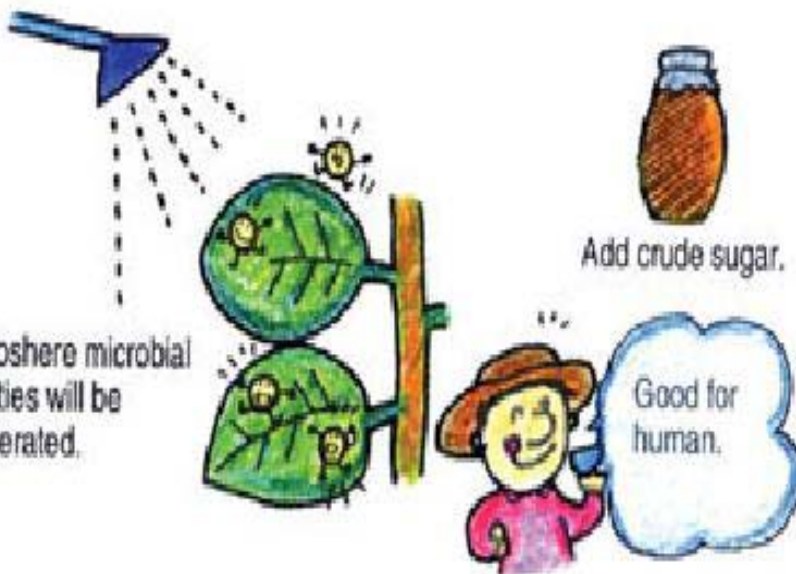


## 7. How to use FPJ

### How to use

0.1–0.2% conc. FPJ is applied on leaf surface and into compost with IMO.

Phyllosphere microbial activities will be accelerated.





# Thank you



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