Preservation of cut flower by drying and formula media

The diversity of Indonesia’s flower and ornamental plants shows that the country is rich in plant species. Flowers and other ornamental foliage plants are used for home, hotel and office decoration. However, the freshness of cut flowers and leaves is relatively limited. To sustain the beauty of the flower and ornamental leaves, drying (Fig. 1) can be done as a preservation method.

There are two drying methods for flowers: 1) by using drying media; and 2) by absorption technique of filler and dye formula.

A. Drying Media

a. Silica gel
- Drying process is 48-72 hours.
- Water absorption must be up to 50%.
- Use repeatedly.
- If the color of silica gel changed, drying can be done by heating.

b. Borax
- Granulated borax, softer than silica gel.

Fig. 1. Dried flowers
Drying time, 1-6 weeks.
To facilitate the processing, mix borax with dust.
c. Dust
  □ A cheaper media.
  □ Must be dried and cleaned before use by heating.

Processes
1. Material preparation
2. Selection of drying media
3. Drying
4. Storage

Stages of drying process
a. Select and pick flower and foliage at the best condition in the morning after the dew has dropped.
b. Prepare the container, fill in with drying media up to 2.5 cm.
c. For flower without stalk, cut the stalk and leaves 2-5 cm only, put the flowers on the media in upside position.
d. Pour the drying media.
e. Close the container and place in a dry area.
f. Keep the flowers in the container.
g. Lift the flower carefully. Pour the media into another container.
h. Clean the media from the flower or foliage.

B. Drying by absorption formula
a. Flower selection criteria:
  □ Fresh
  □ Soft texture
  □ Unrigid
  □ Unwrinkled
  □ Strong
b. The color can be maintained and improved as needed.
c. The filler formula substitutes for lost water during drying process.
d. The filler formula does not contain toxic and other hazardous substances.
e. This method can be used in small and big industries.

Processing method
a. Prepare flowers/leaves/plants which are picked up in optimal maturity and have the best quality.
b. Pour the formula into glass/vase, add some water with 1 part of formula and 3 parts of distilled water (preferably warm water).
c. Remove damaged/defective leaves, and reduce the dense leaves.
d. Immerse the flower stalk into the solution as deep as 4-10 cm. Formula will be absorbed automatically. Soaking time is in accordance with appropriate color (3-4 days for common flowers or 2-4 weeks for little Causarina tree).
e. Drying process must be the upside down method in the drying room with a temperature of 50º-70ºC, for as long as 4-21 hours according to the kind of flowers/plants, or by exposure to the air.
f. Color and texture can be stabilized by hanging up in an upside down position in a cool room at 20-25ºC.