

Promotion and Commercialization of Grafting Technology for Selected Fruit-Vegetables (Tomato, Sweet Pepper, and Bitter Gourd)

- A grafted plant with tomato (*kamatis* in Filipino) as scion and eggplant (*talong* in Filipino) as rootstock
- It is resistant against bacterial wilt, a soil-borne disease that is common among solanaceous crops, like tomato, eggplant and chili pepper, that causes serious damage to farms since it leads to mortality of the plants.
- Bacterial wilt is caused by a bacterium, *Ralstonia solanacearum*, that naturally thrives in the soil, hence, called soil-borne pathogen
- It is also resistant to rainy and waterlogged soil conditions, hence an off-season production technology. This is most helpful during the wet season.
- It has a longer life span as compared to a non-grafted tomato plant

Used varieties:

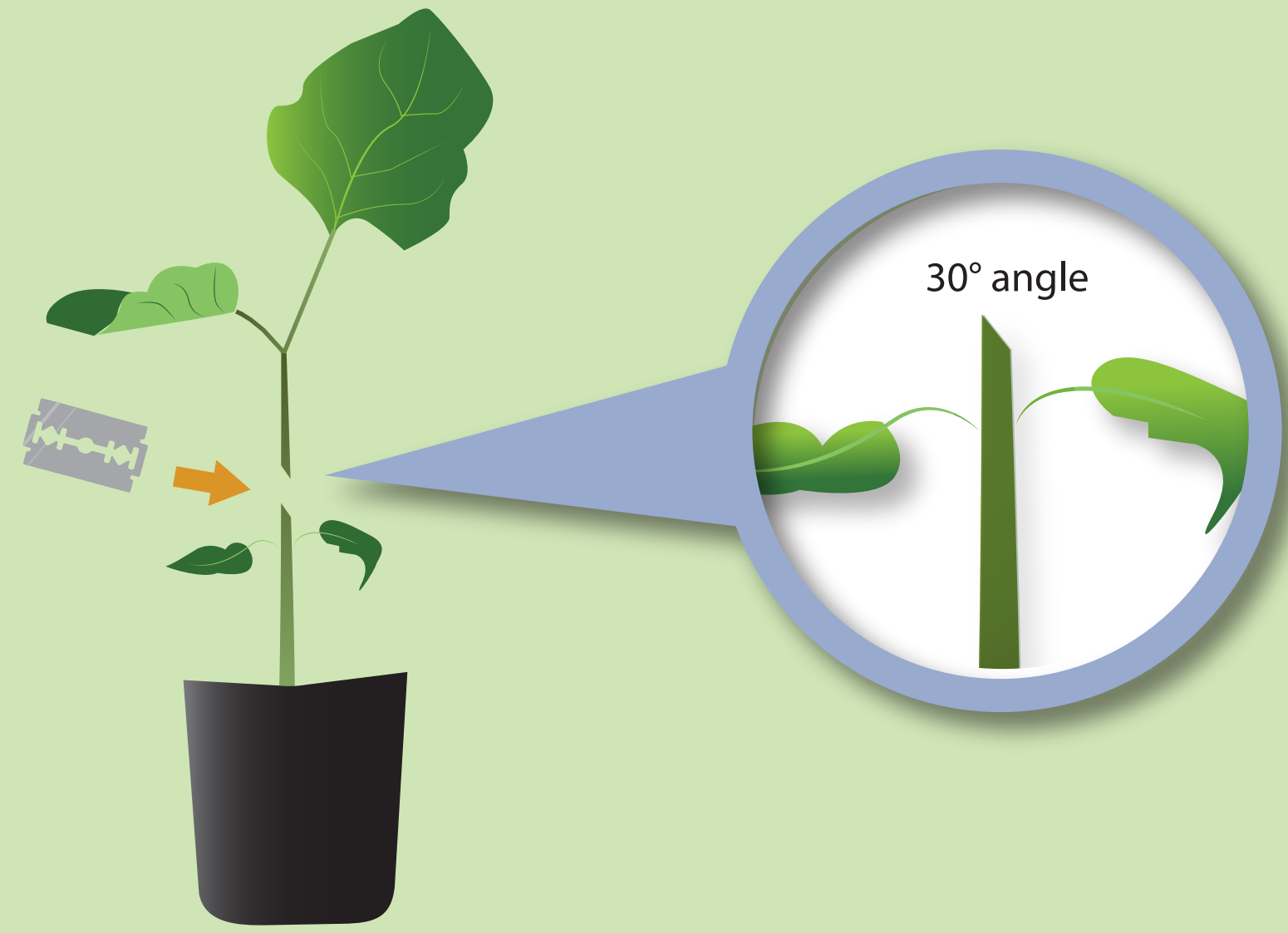
Tomato: Any variety preferred by the farmer
Eggplant: EP-RS # 1 (EG-203), EP-RS # 2 (S00019), EP-RS # 3 (S000708)

Grafting of Tomato onto Eggplant (Kamlong)

Grafting Procedure:

In grafting kamlong, tube grafting method is being used. Note: Cut the portion on tomato and eggplant shoots that will fit into the size of the rubber tube.

1. Cut the eggplant shoot, above the two bottom-most growing leaves or at a part of the stem that will fit into the rubber tube, at 30° angle.



2. Cut the tomato shoot, above the two bottom-most growing leaves or at a part of the stem that will fit into the rubber tube, at 30° angle.



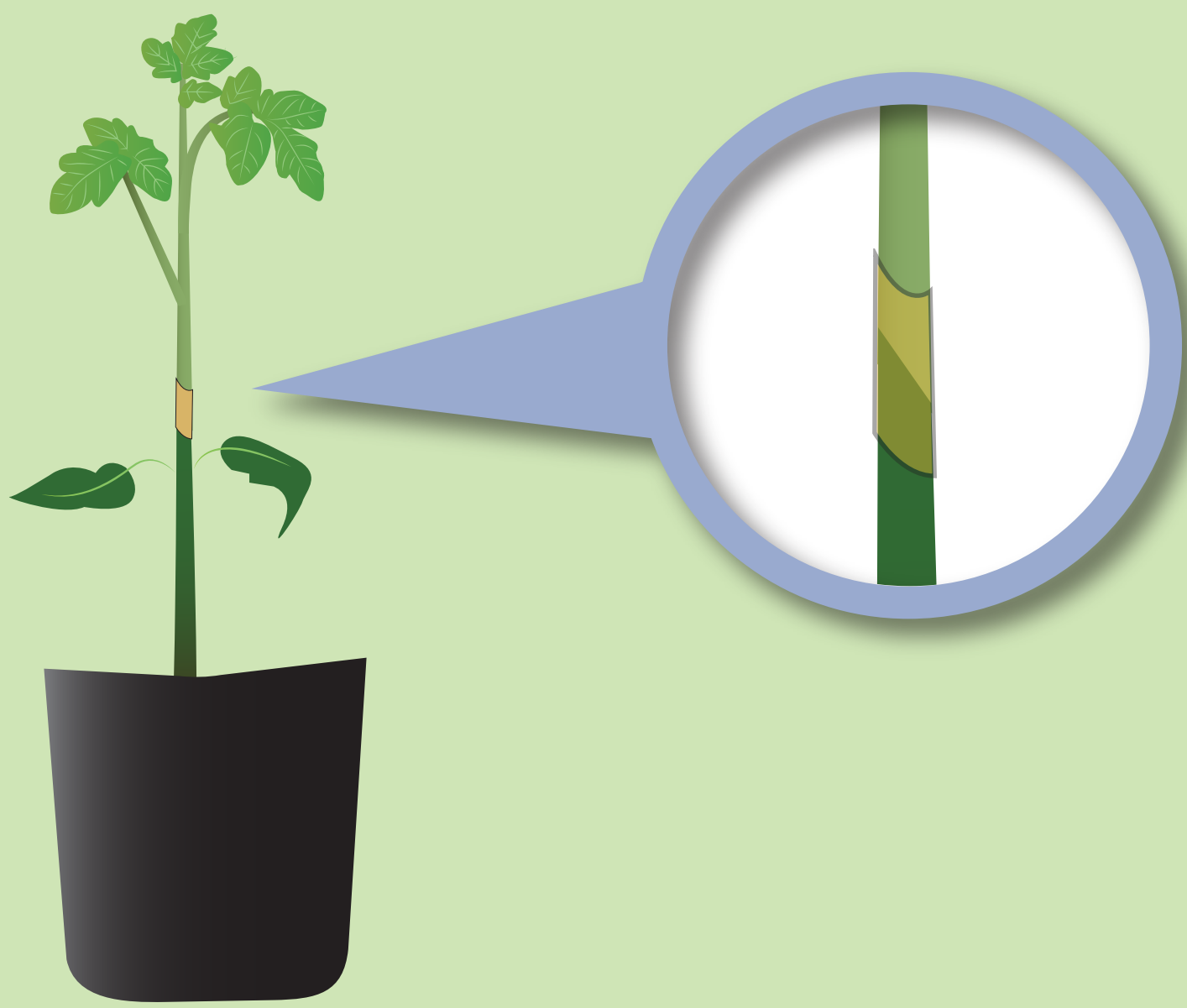
3. Insert the tomato shoot into the rubber tube. Make sure that the shoot occupies only half of the rubber tube.



4. Insert the rubber tube with the tomato shoot into the cut portion of eggplant. Be guided by the shape of the rubber tube in uniting the tomato and eggplant.



5. Make sure that the cut portion of both tomato and eggplant unite appropriately. Observe carefully if the grafted plant can stand on its own.



NOTE

- The varieties used as rootstock are wild and open-pollinated varieties and are characterized by non-palatability; hence, not preferred compared to other varieties. These are proven to be resistant against bacterial wilt.
- Make sure that hands and materials, such as blade and scissors, are sanitized before doing the grafting procedure.

NOTE

- The whole process of grafting takes **42 days** before it can be transplanted to an open field
- A grafted plant lives up to **70 days** in an open field



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