







# Annual International Training Course (AITC) 2023

The application of a parabolic greenhouse solar dryer together with raw material preparation techniques to extend shelf-life and enhance quality of agricultural products













# Demonstration 6\_1<sup>st</sup> May 2023

# Drying of herbs and medicinal plants for herbal tea production



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#### HERB TEA







Lemongrass and Roselle















### **General Process of Solar Dried Products**

Raw materials: Herb/ Medicinal Plants



Raw materials preparations: Selection, Washing, Sanitization, Cutting



Drying or Dehydration: Greenhouse Solar dryer/ tray dryer



**Dried Products** 



Packaging and Storage







## Drying of Lotus flower using a parabolic greenhouse solar dryer















# Drying of Lotus flower using a parabolic greenhouse solar dryer





Drying time ∼2 days







#### Lotus flower tea





https://shopee.co.th/product/98962126/21169361659?gclid=EAlalQobChMly63XhZ7T\_glVulBLBR0VJQqtEAQYAiABEgLG-DBwE





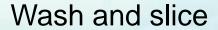


## **Dried Bael- Herb tea**











Dry 3 days

















# **Dried Bael- Herb tea**















# Dried Lemongrass (Lemongrass Tea)







Drying 1 to 2 days





Washing





Cutting







# Lemongrass tea







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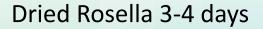




Rosella Tea













• Lemongrass + Roselle Tea





Dried Lemongrass slices 1-2 days



Dried Roselle 4 days







# • Lemongrass + Roselle Tea













# **Dried butterfly pea flower – Herb tea**





















#### Lemongrass + Butterfly Pea Tea











### **Dried Pandan Leaves**









(a) dreamstime.com



Dried Pandan leaf slices in a solar dryer 1-2 days18







• Lemongrass + Pandan Tea













# Drying of herbs using a parabolic greenhouse solar dryer

## Stevia

















## Drying of Herbs using a parabolic greenhouse solar dryer



Dried Indian marsh fleabane or

Pluchea indica (L.)

Moisture content 10%

Water activity 0.55









#### THANK YOU FOR YOUR ATTENTION



At Silpakorn University, Nakhon Pathom Campus, Thailand?