



# 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**

**24 April – 5 May 2023**





AITC course 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





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## 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



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





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



Drying time ~2 days



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## Lotus flower tea



Fairy Dok Cha BA

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## Dried Bael– Herb tea



Wash and slice



Dry 3 days





**TICA**  
Thailand International  
Cooperation Agency



**80<sup>th</sup> Anniversary**  
SILPAKORN UNIVERSITY

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## Dried Bael- Herb tea





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## Dried Lemongrass (Lemongrass Tea)



Lemongrass



Washing



Cutting

Drying 1 to 2 days





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# Lemongrass tea



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# • Rosella Tea



Dried Rosella 3-4 days



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- Lemongrass + Roselle Tea



Dried Roselle 4 days



Dried Lemongrass slices 1-2 days



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- Lemongrass + Roselle Tea





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## Dried butterfly pea flower – Herb tea



Dry half day or 1 day







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## Lemongrass + Butterfly Pea Tea





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## Dried Pandan Leaves



Dried Pandan leaf slices in a solar dryer 1-2 days<sup>18</sup>



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- Lemongrass + Pandan Tea





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## Drying of herbs using a parabolic greenhouse solar dryer

### Stevia



Drying time = 1 day





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## Drying of Herbs using a parabolic greenhouse solar dryer



Dried Indian marsh fleabane or *Pluchea indica* (L.)

Moisture content 10%

Water activity 0.55





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THANK YOU FOR YOUR ATTENTION



At Silpakorn University, Nakhon Pathom Campus, Thailand<sup>22</sup>