

# Use pyrethrum solar dryers for increased income



Polythene sheet on trays



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## Introduction

Drying is one of the major constraints faced by pyrethrum farmers in Kenya.

The solar dryer technology has been available in the country but not widely used since 1999. Construction of two types of the solar dryers has been simplified using locally available raw materials in the pyrethrum growing areas.

## Farmers' Practice

A typical farmers' practice is drying flowers either on some material or on bare ground outside a homestead.

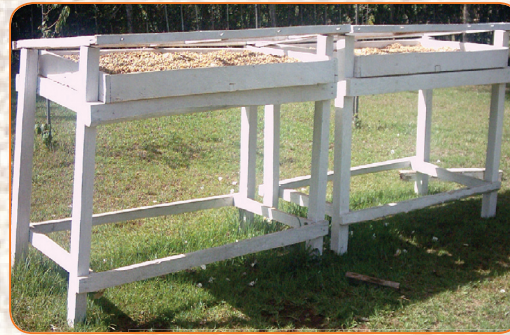
This leads to flower spillage, soiling, fermentation, transportation and storage losses.



Drying pyrethrum on a polythene

## Solar dryer unit

A solar drying unit consists of a wooden framework that holds trays for placement of the flowers.



Trays on wooden framework

The framework has provision for a polythene sheet to be used for covering the flowers when there is rain and also at night.

The new open coffee trays are equipped with a loose polythene paper which is only used when it is raining and at night.

## Dryer advantages

- Faster drying ending with clean dry flower
- Reduced loss of flowers

- Reduced fermentation and better flower quality
- Higher pyrethrins content thus better pay
- Reduced splashing and scattering by domestic animals thus reduced flower loss
- Allows a farmer to handle parallel activities
- Reduced drudgery and hence low labour demand
- Appropriate for rainy seasons by capturing and utilizing short sunshine interludes
- Affordable since construction materials are locally available and easy to construct.

## Cost

Different growing areas have their unique comparative advantages or constraints to material availability but in general, a single dryer unit costs KES 1,000.00.

The structure has a lifespan of up to 5 years with a seasonal replacement of the polythene cover every 6 months at a cost of KES 180.00 (per 2008 price)