The improvements made on the original dryer:

- No need to plane
- Reduced size of timber
- Handles on the tray eliminated
- Reduced production cost
- Adapted the inherent material in the assembly of the dryer
- Production of the schematic procedure of production

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Use mat solar dryer to dry pyrethrum
Introduction
Many farmers dry their pyrethrum in the open sun but solar dryers can also be used.

A solar dryer may be assembled using un planed timber to reduce time and labour.

How to construct a solar dry
Materials required

<table>
<thead>
<tr>
<th>Timber</th>
<th>(c.s.a)</th>
<th>Length</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame</td>
<td>2½”X1”</td>
<td>68½”</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>2”X1”</td>
<td>36”</td>
<td>3</td>
</tr>
<tr>
<td>Binding</td>
<td>½”X1”</td>
<td>70”</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>¾”X1”</td>
<td>37½”</td>
<td>2</td>
</tr>
<tr>
<td>Rear stand</td>
<td>4”X2”</td>
<td>42”</td>
<td>2</td>
</tr>
<tr>
<td>Front stand</td>
<td>4”X2”</td>
<td>45½”</td>
<td>2</td>
</tr>
<tr>
<td>Side beam</td>
<td>1½”X2”</td>
<td>68”</td>
<td>4</td>
</tr>
<tr>
<td>Side beam</td>
<td>1½”X2”</td>
<td>32”</td>
<td>4</td>
</tr>
<tr>
<td>Polythene sheet</td>
<td>53X94”</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Step 1: Main frame
By use of a set square, and measuring tape, lay the timber lengths 42”, 45.5” and 32” from the main frame cluster and nail joining them at right angles. Repeat the process and make another set of frame to make two. Join the two frames to make a main frame as shown in diagram below.

Step 2: Tray
Use the 2 pieces of timber measuring 59” and 34.5” in length then join then as in the diagram below. The mat is cut to size and placed under the assembled tray a binding is used to hold it in place.

Timber (c.s.a) Length Qty
Frame 4”X1” 35 2
4”X1” 61½” 1
2”X1” 61½” 1
2”X1” 35” 1
2”X1” 26½” 4
2”X1” 14½” 4
Binding ½”X1” 60” 2
½”X1” 30½” 2
Rack stopper 2½”X1” 12” 1
Kavurondo Mat 59”X30” 1

Nails
<table>
<thead>
<tr>
<th></th>
<th>Qty</th>
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<tbody>
<tr>
<td>2½”</td>
<td>18pcs</td>
</tr>
<tr>
<td>2”</td>
<td>16pcs</td>
</tr>
<tr>
<td>3”</td>
<td>63pcs</td>
</tr>
<tr>
<td>4”</td>
<td>30pcs</td>
</tr>
</tbody>
</table>

Painting
White undercoat emulsion 2litre
White oil paint 2litre
Thinner 1/2litre

Tools required:
Hammer, Square, Steel tape, Marker pencil.

Step 3: Roof
Follow the procedure used in the construction of the tray to put up the roof. Fit all the timber parts and place it on top of the main frame. The roof is then nailed at each contacting point.

Step 4: Painting
Painting is done after the construction is complete. A white emulsion undercoat is applied and left to dry for a day followed by a second coat.

After four hours, an oil paint is applied and left to dry for a day.

Step 5: Polythene
A polythene sheet measuring 53X94” with an overhang of 16” on each side of the tray is measured, cut and placed by the biddings that were made while constructing the roof. They are nailed back and the dryer is ready for use.