Introduction to Commercial Lavender Production

Processing and Distillation

By Dr. Curtis Beus, WSU Extension, Clallam County
Visitors to Angel Farm at 2008 Sequim Lavender Festival making craft products from fresh lavender
Making a lavender wreath
A completed lavender wreath at Victor’s Lavender
Visitors to New Mexico Lavender Festival making lavender wands
Nicely dried Grosso bundles
You can sell these, or process them further
Without a machine like this stripping the lavender buds from dried bundles is a very labor intensive activity!

De-budding Dried Lavender
What is This Machine?

It is a seed cleaner that has been converted into a lavender bud cleaner.
But, you can do an adequate job of cleaning lavender buds with “lower tech” methods as well.
How about its color?

Is this lavender bud very clean?
How about its color?

Is this lavender bud very clean?
Is this culinary lavender very clean?

How about its color?
- Cleanliness
- Color
- Scent
- Freshness
**Flower Yields -- Grosso**

- Around 125 stems per bundle
- 4-7 bundles per mature plant
- 12-15 bundles yield 1 pound dried buds
- 1/4 to 1/2 lb. Dried buds per plant
- 8,000 to 16,000 bundles per acre
- 1,000 to 1,500 lb. dried buds per acre

**Retail**
- $6-$10 per dried bundle
- $18-$30/lb. Dried buds per plant

**Wholesale**
- $3-$4 per dried bundle
- $10-$15/lb. Dried buds
Essential Oil Production

- Angustifolias yield 3-15 qt./acre (5-25 lb./acre)
- Lavandins yield 20-100 qt./acre (35-170 lb./acre)
- World prices for lavandin oil range from $6-12 lb., and for angustifolia oil $20-$30 lb.
- $300-$2,000 gross per acre lavandins
- $200-$700 gross per acre for angustifolias
- Angustifolia oil “sweeter” than lavandin oil (less camphor)
- Unlikely that small U.S. producers can compete in oil markets
- Oil production for small growers needs to be high quality, niche markets, value-added products
- Oil is sold retail for $6.00 - $15.00 for 10 ml, $9.00 - $18.00 oz., $25 - $40 for 4 oz., $80 - $150 for 16 oz. (angustifolia oil prices being toward the higher end of these ranges)
Yields for Lavender at Robin Hill Farm
Plants in Landscape Fabric

Folgate
Martha Roderick
Wyckoff
Royal Velvet
Royal Purple
Maillette
Super
Grosso
Provence
Old English
## Oil Yields for New Zealand and Sequim Lavender

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Oil – Liter/acre</th>
<th>New Zealand – 2670 plants/acre (Munstead 5340), 5th Season</th>
<th>Sequim, RHF, 2900 plants/acre, 5th season</th>
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<tbody>
<tr>
<td>Munstead (Clyde)</td>
<td>3.8</td>
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<td>Folgate</td>
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<tr>
<td>Munstead (Omarana)</td>
<td>13.0</td>
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<td>Martha Roderick</td>
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<td>Munstead (5/14)</td>
<td>2.2</td>
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<td>Wyckoff</td>
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<tr>
<td>Tarras</td>
<td>13.5</td>
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<td>Royal Velvet</td>
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<td>Twickel Purple</td>
<td>7.1</td>
<td></td>
<td>Royal Purple</td>
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<tr>
<td>Grosso</td>
<td>97.5</td>
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<td>Maillette</td>
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<td>Super</td>
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Distilling Essential Oils
Copper table top still I used for doing my lavender oil trials – obtained from the Essential Oil Company, Portland, OR
Annie Harmon at 2006 Lavender Conference with her small Alembic Still
Mike Greenhaugh of Martha’s Lane Lavender in Sequim with his Alembic Still
A Reimers powered still in New Mexico
A small portable still made by Newhouse Manufacturing at Olympic Lavender in Sequim
Randy Nichols of Jardin du Soliel Lavender in Sequim explaining his still
Mike Shirkey of Port Williams Lavender in Sequim explaining his still at 2008 Lavender Festival
NEWHOUSE STAINLESS STEEL MINIATURE STILL, PORTABLE OR STATIONARY FOR PROCESSING ESSENTIAL OILS.

ALL T316L FOOD GRADE STAINLESS STEEL StillS WHERE OIL MAKES ANY CONTACT. FRAME, WATER TANK, AND TRAILER ARE MILD STEEL.

Model: EOS T-100

Easy power hookup to 115V still/service cord.
Easy water fill with swivel adapter on feed tank

START WITH SINGLE STILL AND ADD MORE AS YOUR PRODUCTION GROWS.

EOS T Trailers include:
- Boiler 10 lb or as needed
- Propane tank 25 ga lon or as needed
- Feed Water Tank 200 ga lon or as needed
- EOS Still, 1 or 2 (depending on capacity needed)
- Removable deck platform with or without trailer

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A representative of Newhouse Manufacturing explaining one of his larger stills at Lavender Festival