WASHINGTON STATE UNIVERSITY
CLALLAM COUNTY EXTENSION

Introduction to Commercial Lavender Production

Processing and Distillation

By Dr. Curtis Beus, WSU Extension, Clallam County

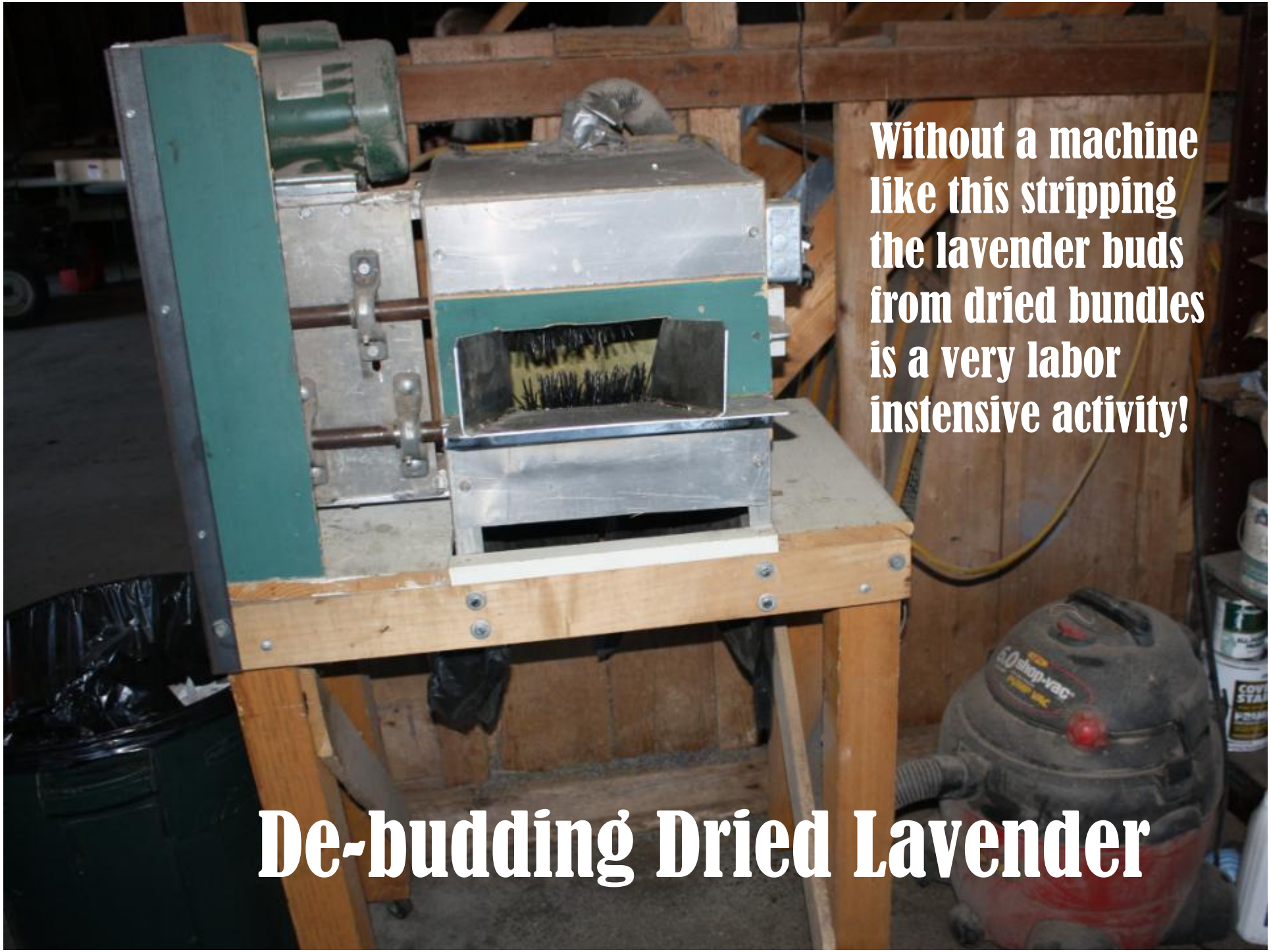
Visitors to Angel Farm at 2008 Sequim Lavender Festival making craft products from fresh lavender

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

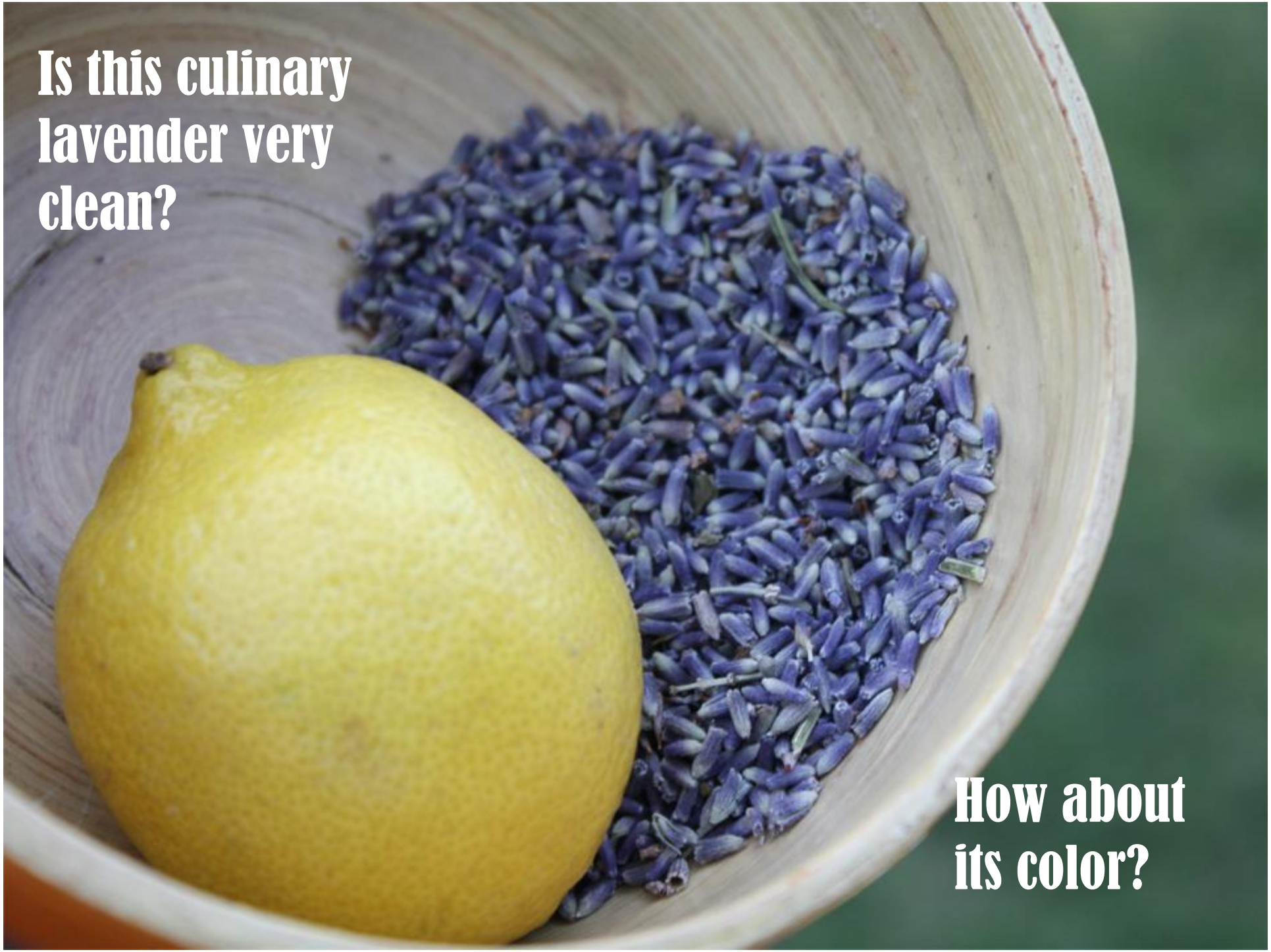

Without a machine like this stripping the lavender buds from dried bundles is a very labor instensive activity!
De-budding Dried Lavender

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
- Wholesale -- $3-$4 per dried bundle
- Retail -- $18-$30/lb. Dried buds
- Wholesale -- $10-$15/lb. Dried buds

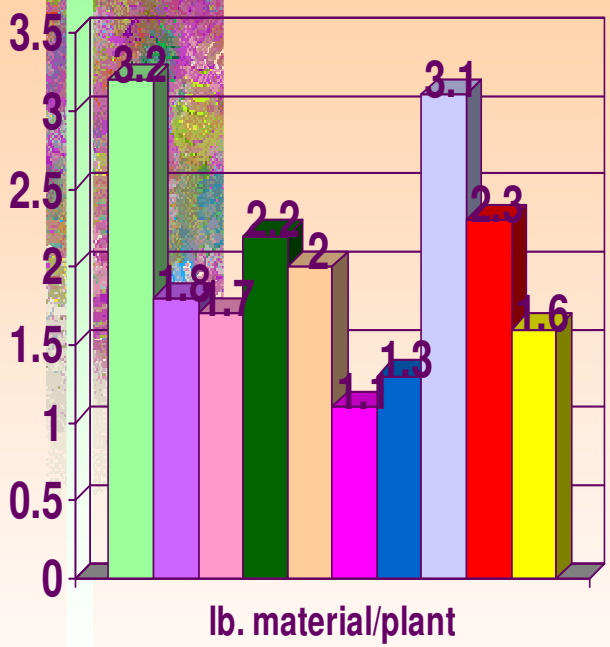
Essential Oil Production

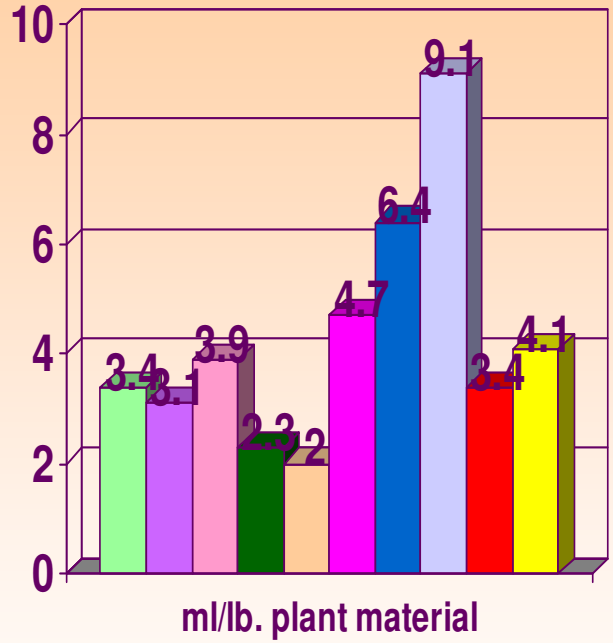
- Angustifolias yield 3-15 qt./acre (5-25 lb./acre)
- Lavandins yield 20-100 qt./acre (35-170 lb./acre)
- World prices for lavandin oil range from $6-12 lb., and for angustifolia oil $20-$30 lb.
- $300-$2,000 gross per acre lavandins
- $200-$700 gross per acre for angustifolias
- Angustifolia oil “sweeter” 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)*

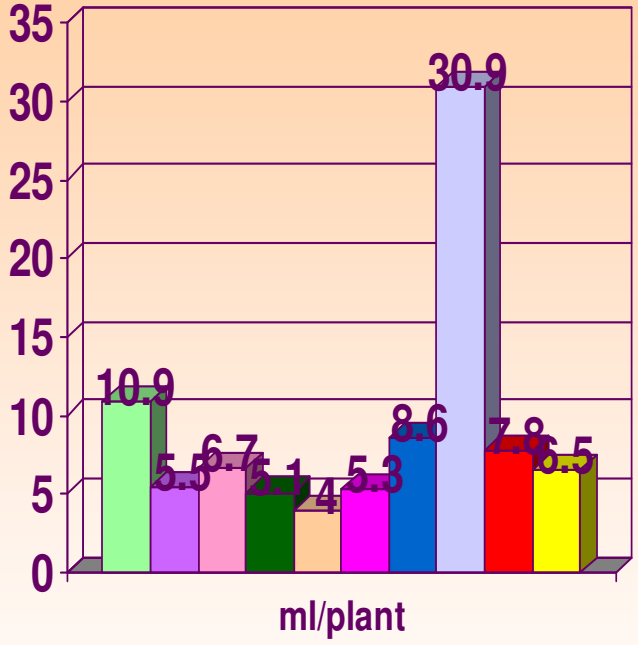
Lavender Variety Trials
Plot Layout
What is Lavender?
Lavender is an ancient, perennial herb, originating from the Mediterranean region, that has long been valued for its aromatic properties.
Lavenders and Lavandins
There are two primary types of lavender grown commercially: Lavandins a hybrid lavender known as Lavandins a lavender, and "True" Lavender's Lavender's organisms.
It Takes Over 20 Pounds of Lavender Flowers to Produce an Ounce of Lavender Oil.
Sequim Lavender
Beginning around 1990, many small lavender farms have been developed in Eastern Clallam County. This rapidly growing new industry shows great promise for local agriculture and tourism.
Purpose of This Trial
The primary purpose of this trial is to investigate all yields of various lavender varieties in our climate, using different weed control and management strategies.

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

Folgate	Martha Roderick
Wyckoff	Royal Velvet
Royal Purple	Maillette
Super	Grosso
Provence	Old English

Folgate	Martha Roderick
Wyckoff	Royal Velvet
Royal Purple	Maillette
Super	Grosso
Provence	Old English

Oil Yields for New Zealand and Sequim Lavender

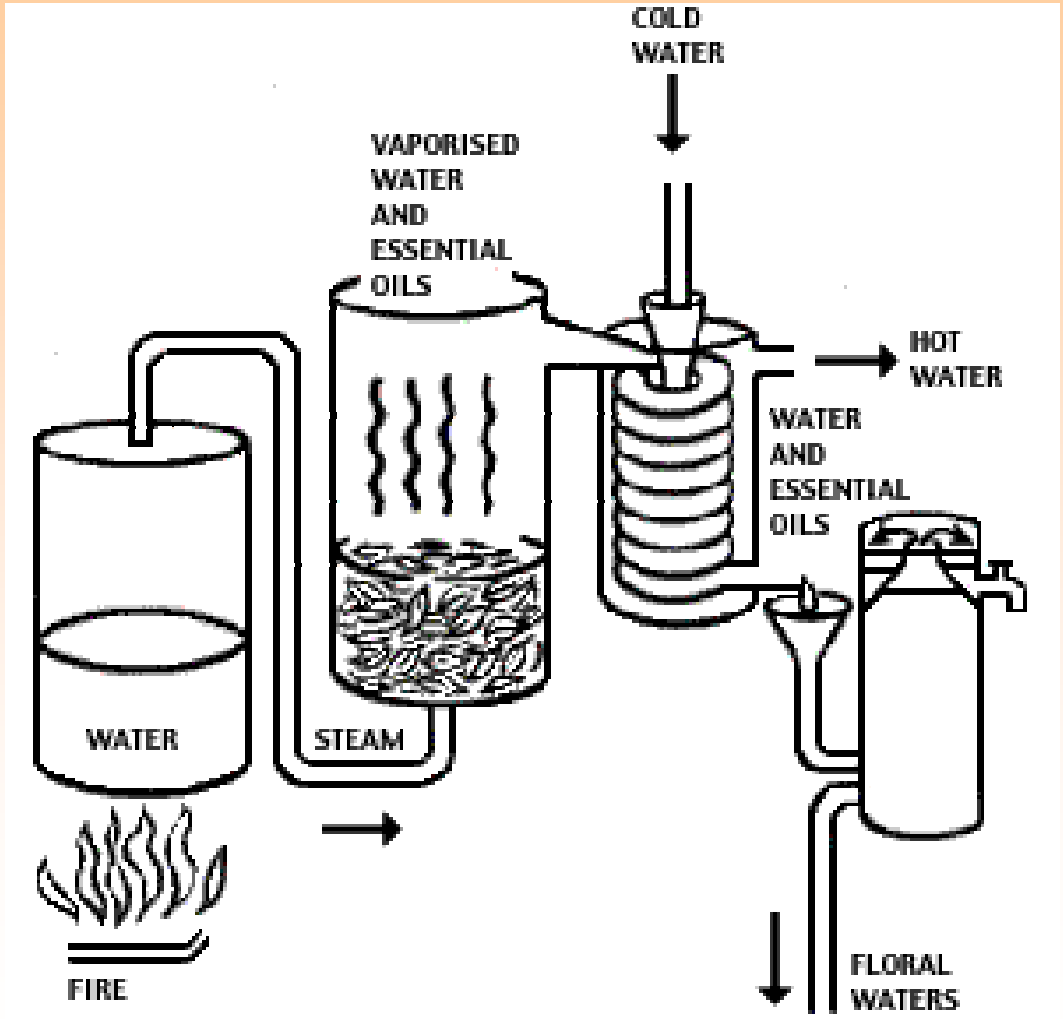
New Zealand – 2670 plants/acre (Munstead 5340), 5th Season

Cultivar	Oil – Liter/acre
Munstead (Clyde)	3.8
Munstead (Omarana)	13.0
Munstead (5/14)	2.2
Tarras	13.5
Twickel Purple	7.1
Grosso	97.5
Super	65.4
Bogong	98.5
Old English	25.9
Impress Purple	76.2

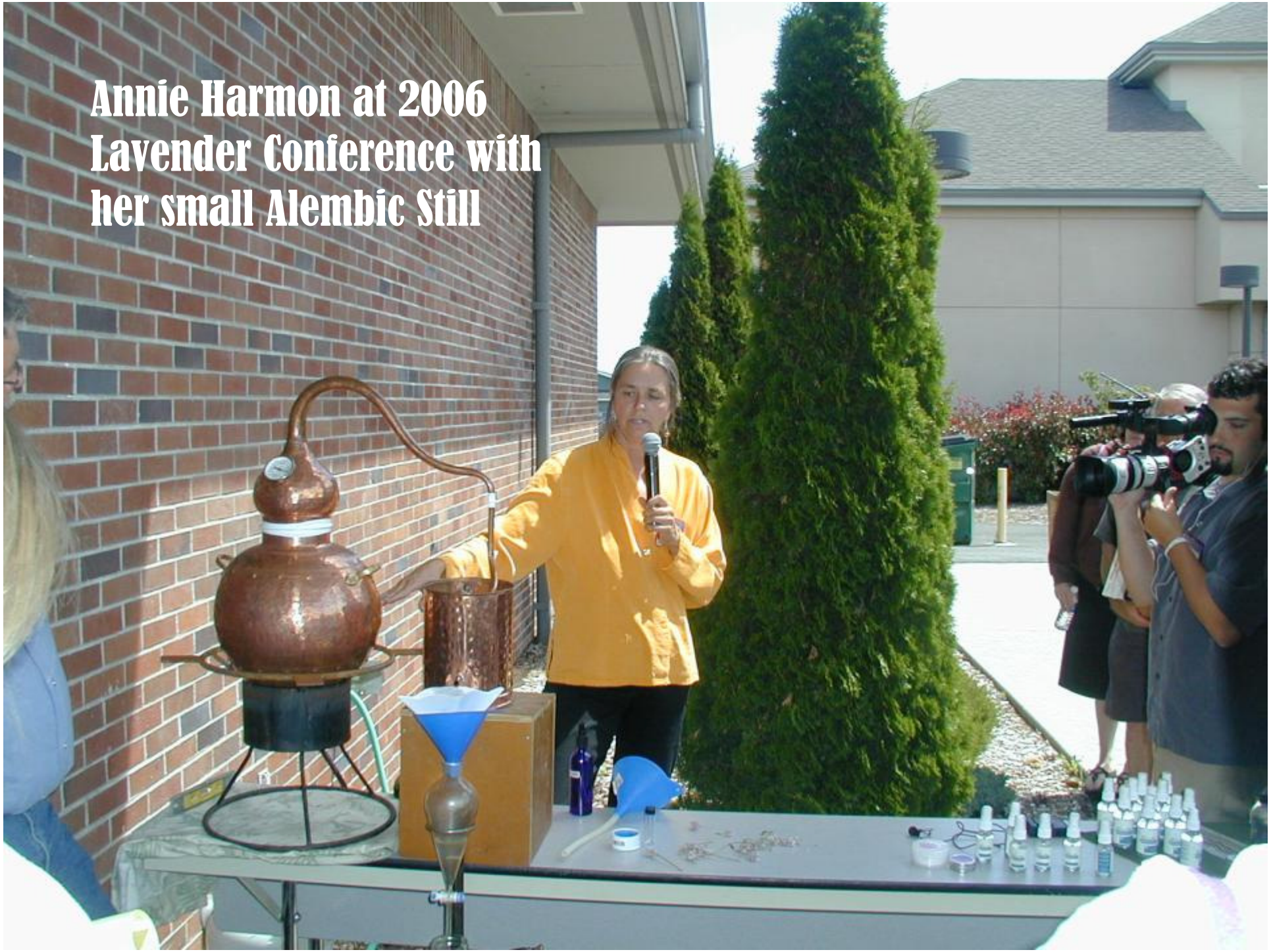
Sequim, RHF, 2900 plants/acre, 5th season

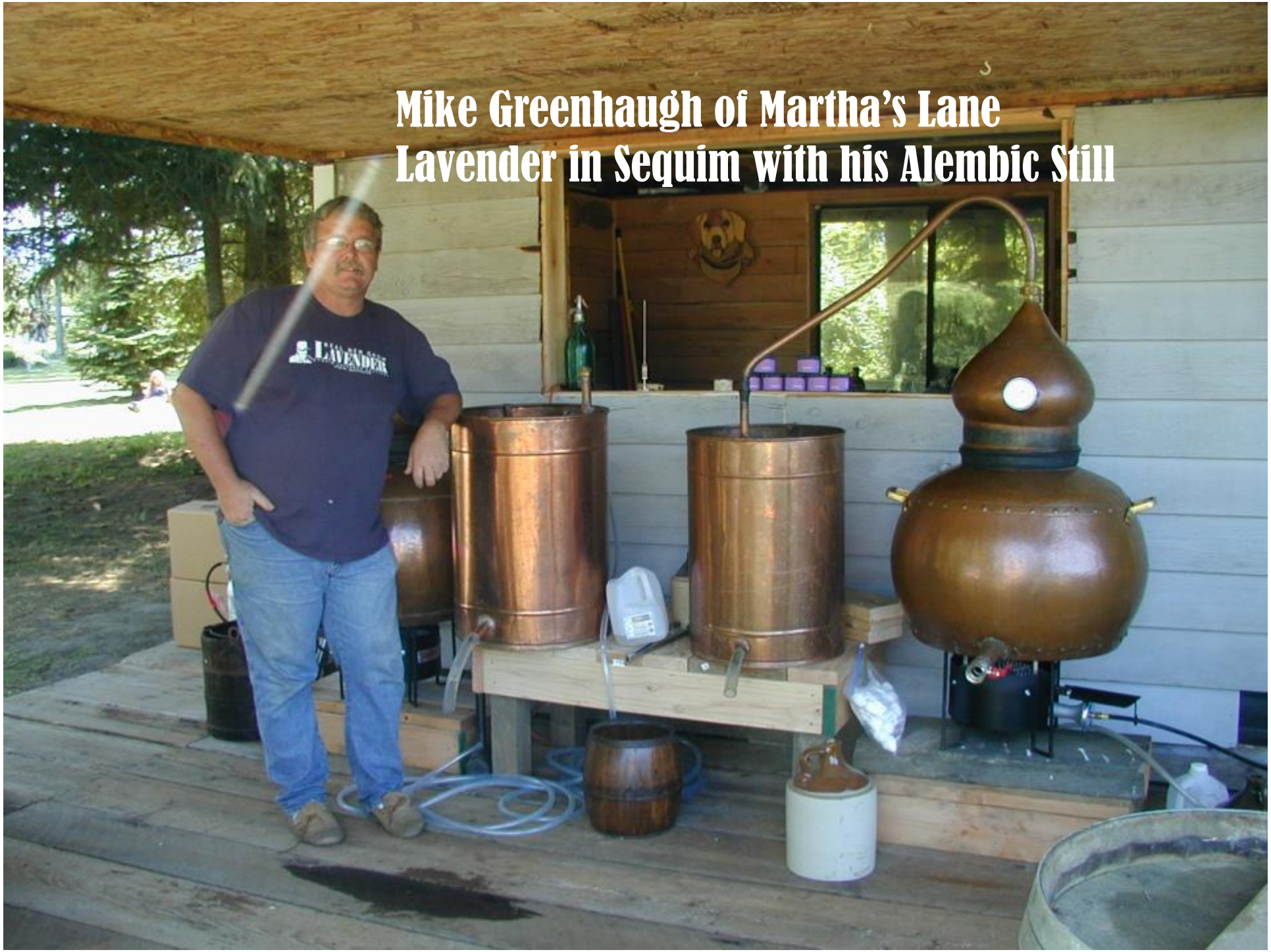
Cultivar	Oil – Liter/acre	
	No fabric	In fabric
Folgate	21.2	31.6
Martha Roderick	13.6	16.0
Wyckoff	16.2	19.4
Royal Velvet	13.6	14.8
Royal Purple	9.0	11.6
Maillette	15.7	15.4
Super	27.3	24.9
Grosso	76.6	89.6
Provence	21.2	22.6
Old English	21.2	18.9

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

Reimers

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

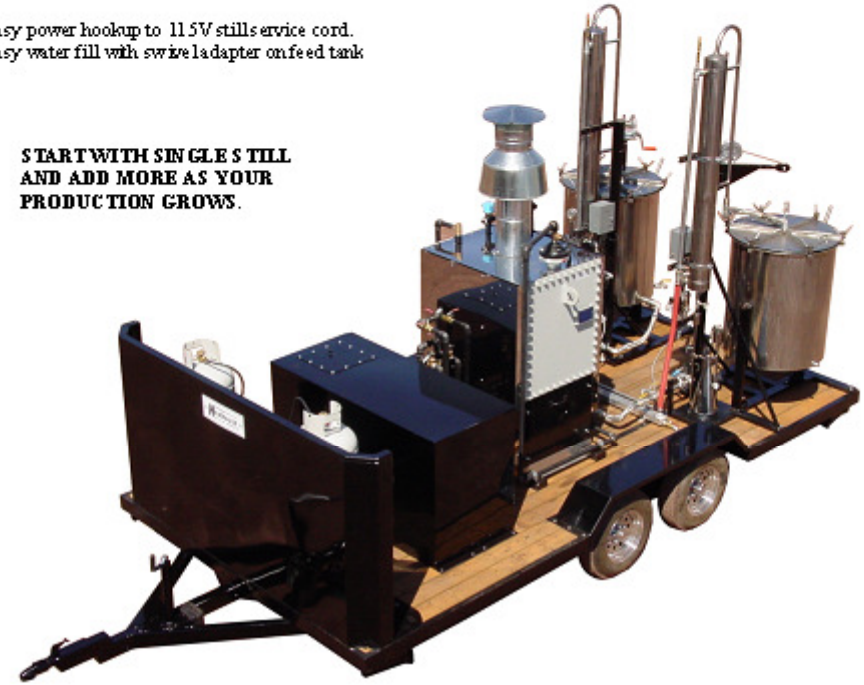
NEWHOUSE STAINLESS STEEL MINIATURE STILL, PORTABLE OR STATIONARY FOR PROCESSING ESSENTIAL OILS.

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

Model: EOST-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.



EOST Trailers include:

- Boiler 10 hp or as needed
- Propane tanks 25 gallon or as needed
- Feed Water Tank 200 gallon or as needed
- EOS Still, 1 or 2 (depending on capacity needed
- Removable deck platform with or without trailer

1048 N. 6th STREET,
REDMOND, OR 97756
Toll Free: 1-800-587-1055
PHONE: (541) 548-1055
FAX: (541) 548-4144
E-mail: info@newhouse-mfg.com
Web Site: www.newhouse-mfg.com

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