Blackberry Production in Mexico
Miguel Ahumada - Sun Belle Berries
Cane Berry Day, San Luis Obispo, CA. 2016
Michoacan

- Latitude: 19.35 degrees No.
- Altitude: 4,920 ft
- Mild tropical climate
- < 200 chill hours

BLACKBERRY HARVEST – LOS REYES, MICHOACAN
2014 - US Fresh Blackberry Sales
(crates 12 X 6 oz)

- MEXICO 61%
- CALIFORNIA 27%
- GUATEMALA 8%
- SOUTHEAST U.S. 4%

Gaskell, Cane berry day, Jan 2015
Floricane blackberry production in Mexico

- Largest producer of fresh blackberries in the world; $282.45 millions industry value
- 27,000 estimated acres for 2015
- Michoacan 90% production, | -- Jalisco rapidly expanding
- 80 % of the fruit is exported, mainly to US and EU

-- www.aneberry.org

- 17 year - run for Tupy
- Defoliation system, from July to Feb
- Early to late season
- Thorny, erect
- Large berry: 7-9 gram
- 10-20,000 lb./ha
- Flavor, balanced sweetness & acidity, with some bitterness after tested
Blackberry Shipping Point Prices, Retail Prices, and Number of Retail Stores (Source: USDA-AMS)

RETAIL STORES
- SOUTHEAST (GA,NC)
- SANTA MARIA, CA
- SALIS-WATSONVILLE, CA
- MEXICO CROSSINGS

RETAIL PRICE

Thomsen NARBA Conference 2015
Blackberry Shipments Reported to USDA Agricultural Marketing Service 2000-2014

Thomsen NARBA Conference 2015

10,000 pound units


CALIFORNIA-CENTRAL
CALIFORNIA-SOUTH
OREGON
SOUTHEAST U.S.
GUATEMALA
MEXICO
Weekly Blackberry Shipments Reported to USDA Agricultural Marketing Service 2010-2014

Thomsen NARBA Conference 2015

10,000 pound units


- CALIFORNIA-CENTRAL
- CALIFORNIA-SOUTH
- SOUTHEAST U.S.
- GUATEMALA
- MEXICO (Competitive)
- MEXICO (Non-competitive)
Ten years average USDA prices Blackberry, fruit origin CA-Mexico
“Blackberry Row” in Los Reyes. Michoacan
Typical fields
Defoliation-based system

• Plants are matured in Mexico by the application of concentrated salts to the foliage.

• Typically, growers will mature plants for 22 to 60 days prior to defoliation.

• The time required for defoliation depends entirely on the condition of the plant, which is greatly influenced by the time of year and age.
Maturing plants prior to defoliation

Cycles

- Plants are defoliated in July, harvest from October to December
- Second defoliation, harvest from end of March to early June
- Follow by a mowdow: September – October, one harvest that year
- Plants stays in the ground for 10 - 12 years in average, depending of soil pathogens
# Maturation

<table>
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<th>Mixture</th>
<th>Chemicals</th>
<th>Concentration</th>
<th>Frequency</th>
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<td>M-K</td>
<td>Potassium sulfate</td>
<td>8.8 # / 50gallons</td>
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<td>Vegetable oil</td>
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<td>13.2 # / 50 gallons</td>
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<tr>
<td>D-K</td>
<td>Potassium sulfate</td>
<td>88# / 50 gallons</td>
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<td>Vegetable oil</td>
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</table>
Defoliation and Pruning
Feb MD every two years
Hormones are use to increase fruit set
Tupy
Pest and Disease incidence contributing to uncertain future for Tupi

• Diseases
  – Downy Mildew
  – Fusarium
  – Crown gall
  – Powder Mildew

• Insects
  – Broad mite
  – Red Berry mite
  – Two spotted mite
  – Western Flower Thrip
Challenges

• Labor shortages

• Soil diseases > fusarium

• New pests >
  broad mite and red berry mite

• Cultural practices;
  tunnels, drip irrigation

• Lack of University Extension Service

• Need for a new variety
Need for Innovation: 17 years of ‘Tupy’

- Reversion main problem of Tupy
- Flood irrigation still being used in many fields, causing an increase of reversion
Tunnel use on the increase
Some production cost from Mexico

- Ag workers average paid US$10.90 a day or US$19.44 ($10 pesos per bucket harvest, average 35 bucket a day)

- Land rent US$ 1,010 per acre

- Urea 110 Lb US$ 17.77

- Captan 2.20 lbs US$ 10

- Tunnels cost US$ 6,312 per acre
Future trends?

• 10 fold growth since 1995

• Growth slowing

• Challenges to future growth
  • - Labor,
    - Rising costs,
    - Unseasonal weather / climate change

• Multinational companies on both sides of boarder and complementary production windows with US