Plant protection in organic raspberry production

Cofunded project Climafruit

Funded by the Swedish Board of Agricultural 2012-14

Birgitta Svensson
• Organic production of raspberries and blackberries in high tunnels, 2008-2011

High yielding raspberries of high quality in organic production during an extended season, floricane and primocane cultivars
Required fertilization in organic production in high tunnels

**Pests and diseases**

– Aphids, *Aphis idaei*, all cultivars
– Raspberry leaf and bud mite, *Phyllocptes gracilis*, Glen Ample, Glen Doll (Glen Fyne, Octavia, Tulameen)
– *Phytophtora*?
New project 2012-2014
Plant protection in organic raspberries in tunnel

• Summer raspberries: Leaf and bud mite

• Primo cane raspberries: Aphids
and crumbly fruits
Treatments leaf and bud mites:

Rape seed oil + soap Zence (Potassium oleate)

- 1 percent of each, once a week, May 18-August 31 (leaves)
- 2 percent of each, every second week, May 18-August 31 (leaves)
- 2 percent, twice in September (buds)
- 4 percent, twice in October (buds)

The oil/soap mixture will smother the mites. A "bath" of oil covering the winter buds will kill a lot of mite eggs (Nina Trandem, Bioforsk).
Pre-study October 2011

mites/10 buds in Glen Ample

- untreated
- oil+soap 4 % 2 times
- oil+soap 2 % 2 times
- sulphur 1,5 % 4 times
Treatments leaf and bud mites:

Rape seed oil + soap Zence (Potassium oleate)

- 1 percent of each, once a week, May 18-August 31 (leaves)
- 2 percent of each, every second week, May 18-August 31 (leaves)
- 2 percent, twice in September (buds)
- 4 percent, twice in October (buds)

The oil/soap mixture will smother the mites. A ”bath” of oil covering the winter buds will kill a lot of mite eggs (Nina Trandem, Bioforsk).
Aphids, *Aphis idaei*, in primo cane raspberries
Aphids, *Aphis idaei*, in primo cane raspberries

- Untreated
- Raptol (rape seed oil + pyrethrine) twice in May
  - Soap, Zence 2% 7 Day, May- end of August
  - Eradicoat 1,5 %, 7 Day, May- end of August
  - Eradicoat 1,5 %, 14 Day May- end of August
kg per plant - 7 September, 2012

Treatments for aphids in primocane raspberries, 2012