

Do you know how many spots are on a Ladybird?



Common Ladybird - Coccinella Septempunctata

Can you name seven pollinators?



Stingless Bee - *Tetragonula Carbonaria*



Hover Fly - *Episyrphus Viridaureus*



Blow Fly - *Lucilia cuprina*



Blue Banded Bee - *Amegilla cingulata*



Wanderer Butterfly - *Danaus plexippus*



Bumble Bee - *Bombus terrestris*



European Honey Bee - *Apis Mellifera*



Growers are demanding stronger hives.
How are we going to achieve this?

- Nutrition
- Breeding Stock
- Environmental Conditions



Supplementary Feeding



Stock Selection

A survey of our beekeeper's was carried out to determine the most common negative factors associated with pollination.

- Cost of preparing beehives
- Agricultural Chemicals
- Disease risk

Cost of preparing beehives

“We feed more than a kilo of pollen supplement per hive every 10 days for about 6 weeks in autumn. Then another round shortly after the winter solstice.”

Randy Oliver - California

Agricultural Chemicals

“Iprodione use banned in European Union.”

Almond Board of Australia

Agricultural Chemicals

“The Australian Pesticides and Veterinary Medicines Authority which regulates the use of neonicotinoids in this country, have released a statement there was no evidence of bee population declines in Australia.”

ABC Rural News

Agricultural Chemicals

Bee Sample

Bioresmethrin 16.63 µg/kg

Iprodione 44.85 µg/kg

Honey Sample

Clothianidin 20.70 µg/kg

Iprodione 18.00 µg/kg

NSW Environment Protection Authority

Agricultural Chemicals

“Most disturbing, bees that ate pollen contaminated with fungicides were three times as likely to be infected with *Nosema ceranae*. Widely used fungicides had been thought to be harmless for bees as they’re designed to kill fungus, not insects.”

Jeff Pettis USDA

Disease Risk

“In west Victoria 1 in 10 hives had AFB.”

The Buzz Magazine
South Australian Apiarists' Association

Disease Risk

“If all colonies are strong the risk of
disease transfer is significantly reduced.”

Doug Somerville - NSW DPI

Suggested Recommendations

- Further research into supplementary feeding
- Stronger regulation into agricultural chemicals
- Quantify the risk of the spread of disease

Photo credits

Ladybird - Wikicommons: Dominik Stodulski

Stingless Bee - Flicker: James Niland

Hover Fly - Flicker: James Niland

Blow Fly - Flicker: Graham Wise

Blue Banded Bee - Wikicommons: Vengolis

Wanderer Butterfly - Wikipedia: Kenneth Dwain Harrelson

Bumble Bee - Wikicommons: Ivar Leidus

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