

Problems Associated with Organic Strawberry Nursery Plants

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Pests and diseases

■ Arthropods

- 2-spotted mite, Lepidoptera caterpillars, whitefly, aphids, vinegar (fruit) fly

■ Soilborne pathogens

- Phytophthora, Colletotrichum, Pythium, Verticillium, Rhizoctonia

■ Foliar and fruit pathogens

- Botrytis, anthracnose, powdery mildew, Xanthomonas (ALS), CLS

■ Birds



IN THE BEGINNING

- YOU HAVE PLANTS
FREE OF DISEASE
OR PATHOGENS

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California Strawberry Nursery Production and Certification

Nuclear Stock

(Meristem from heat treated plant tissue cultured, or progeny of foundation stock

tested by indexing)

Year 1

Foundation Block

In Screenhouse

Foundation Block

In Field

Year 2

Registered Block (Registered stock)

Year 3

Certified Block (Certified stock)

Year 4

Fruit Production

Year 5



MERISTEMS

1 mm



2005/01/02



A Pathogen Free Meristem Plant

SOIL

- SOIL IS THE PROBLEM FOR DISEASE OR PATHOGEN FREE PLANTS

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Crown Nursery - Screen House with drip system

Portable Screenhouses Placed on Fumigated Ground - Sierra-Cascade Nursery



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Outside Foundation Block Planted In a Single Row for Good Air Movement and Easy Spraying - Crown Nursery



<--- Drip System Buried

Sand and Gravel

Lassen Canyon's Outside Foundation Block - Planted In Groups



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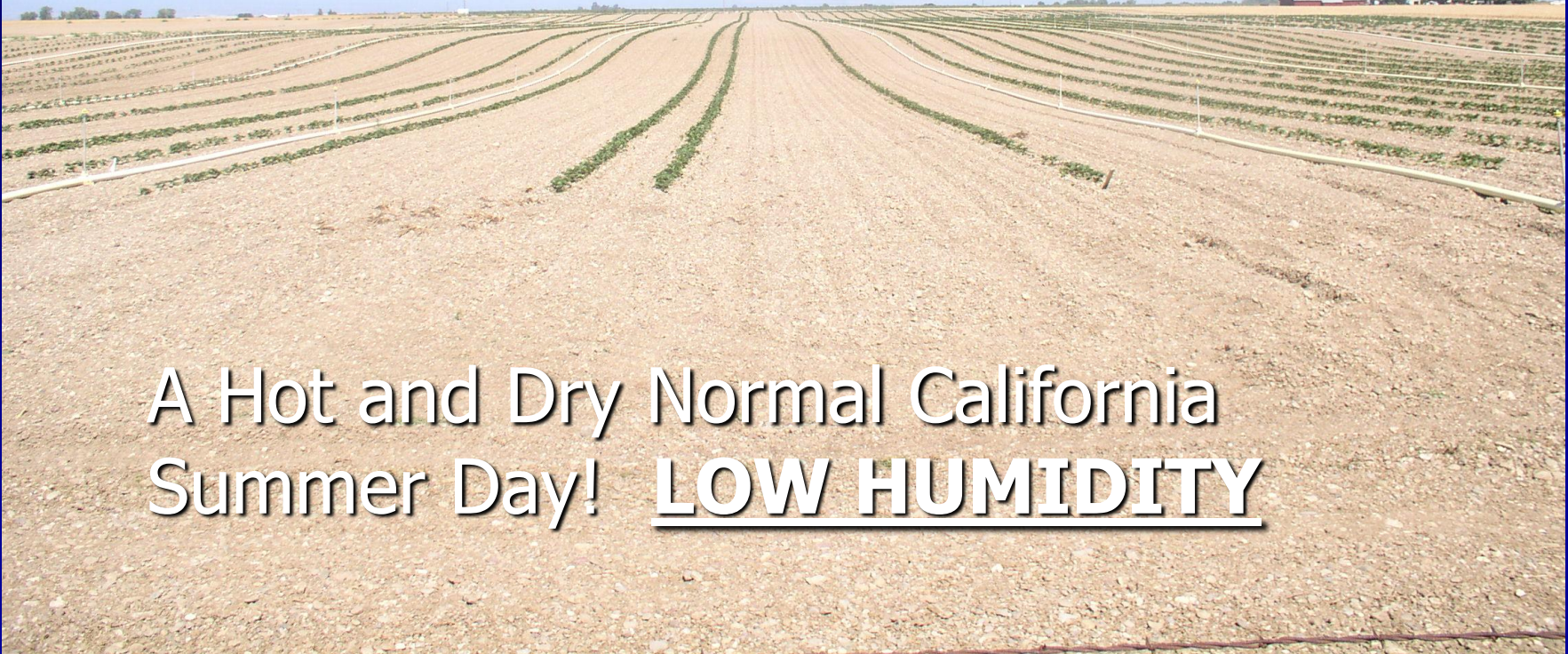
Year 4

Fruit Production

Year 5



Registered Block or Increase Block - Crown Nursery



A Hot and Dry Normal California
Summer Day! **LOW HUMIDITY**

Drip System In Use In the High Elevation - Cedar Point Nursery



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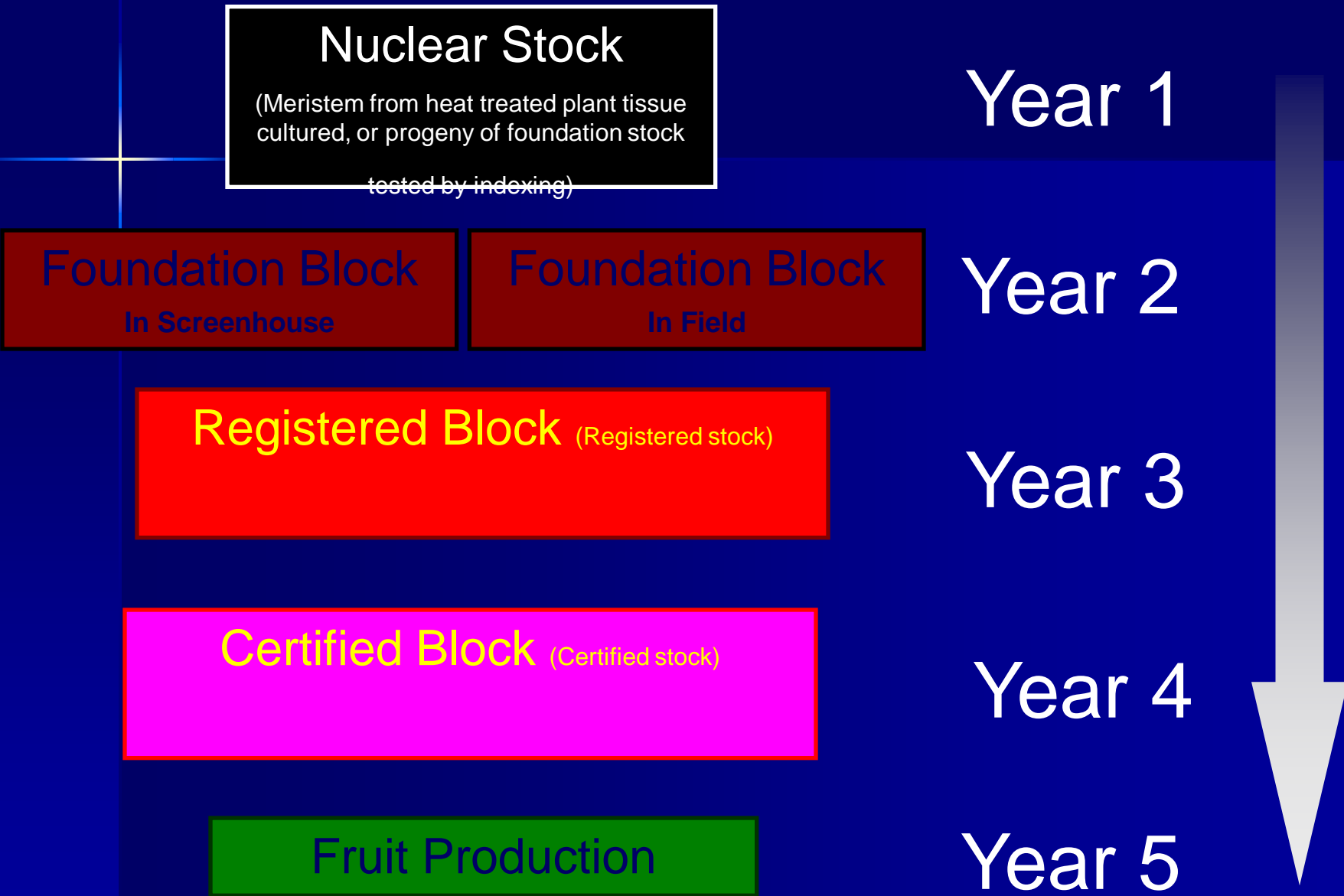
■ Birds



THE LAST NURSERY YEAR

- PLANTS ARE GROWN AGAIN IN SOIL THAT CAN HAVE DISEASE

California Strawberry Nursery Production and Certification



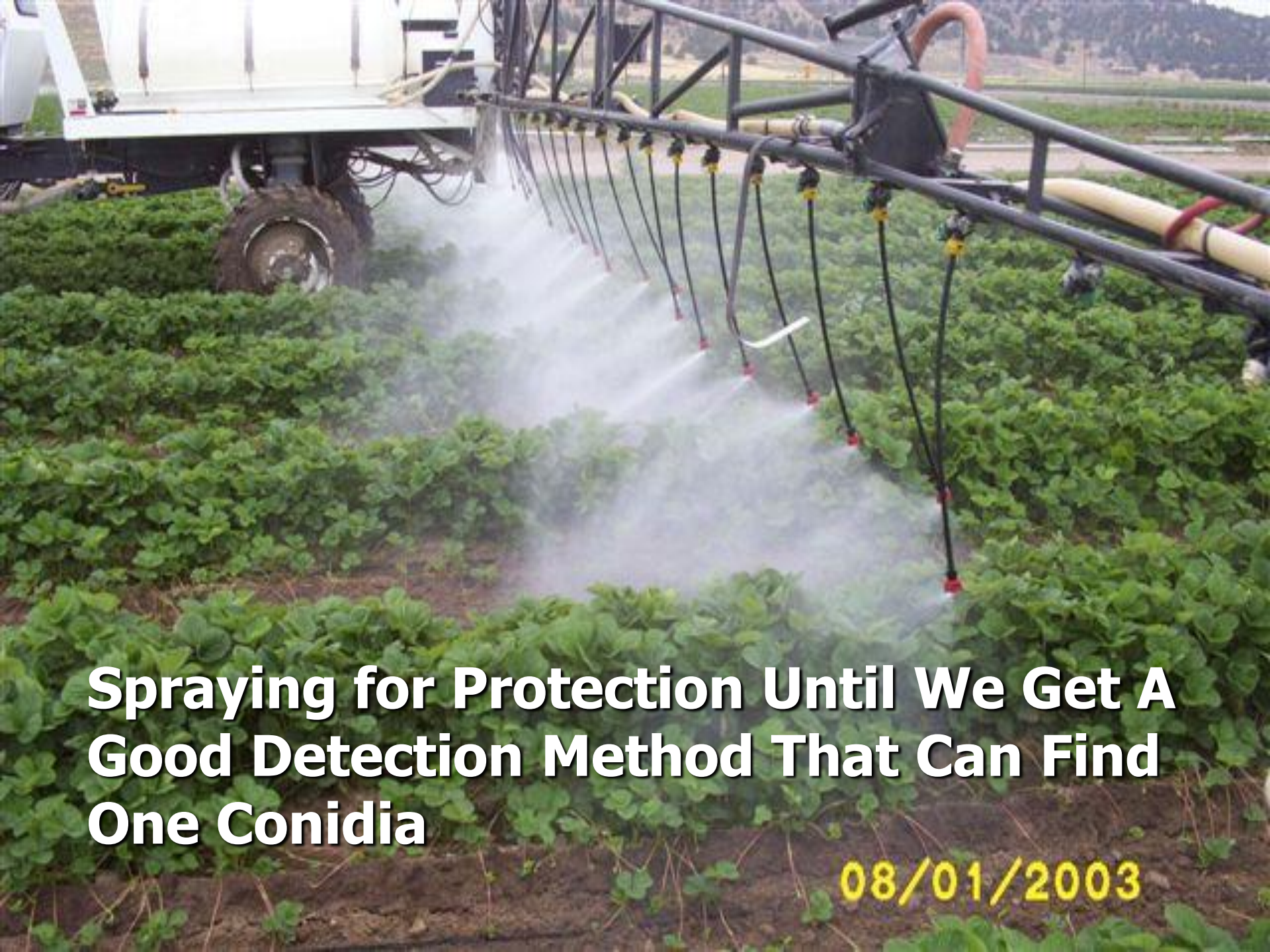
Bed Machines - Lassen Canyon Nursery - Macdoel, CA.



Drip System In Use In the High Elevation - Cedar Point Nursery



08/01/2003



**Spraying for Protection Until We Get A
Good Detection Method That Can Find
One Conidia**

08/01/2003

Mechanized Trim Shed with Hydro Cooler - Cedar Point Nursery (CAN ALSO DIP PLANTS IN CHEMICALS OR WASH PLANTS)



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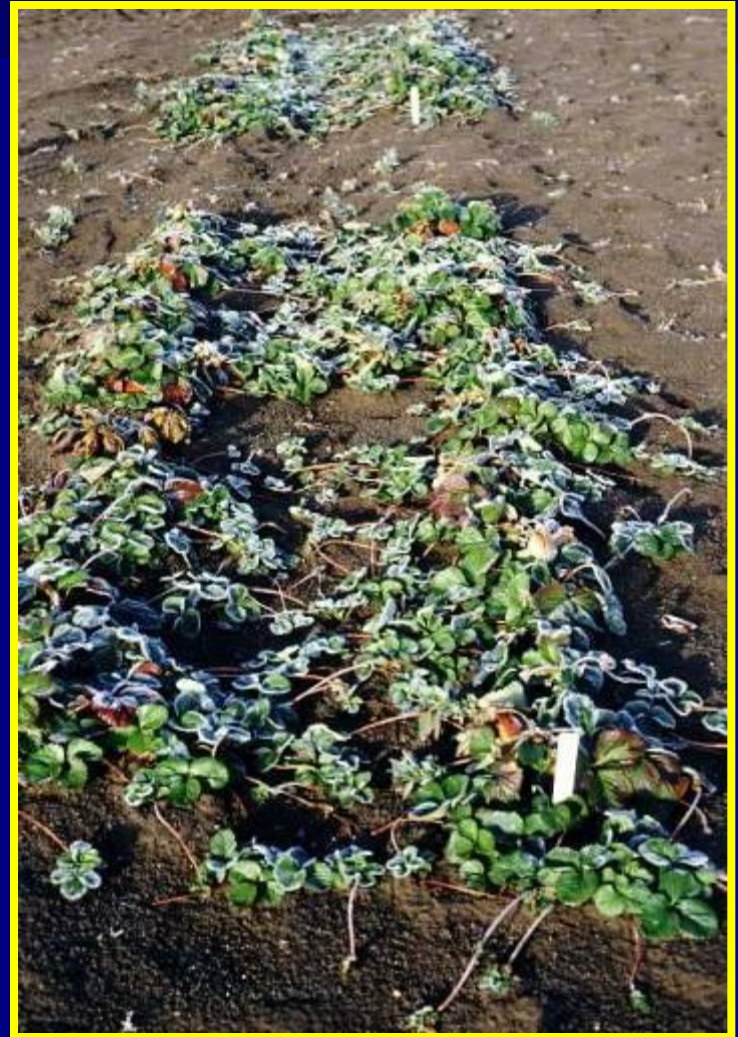


WITHOUT FUMIGATION

- YOU COULD GET PLANTS WITH DISEASE OR PLANT PATHOGENS



Fumigated and non-fumigated runner nursery plots



Fumigated bed



Plants from
fumigated
nursery

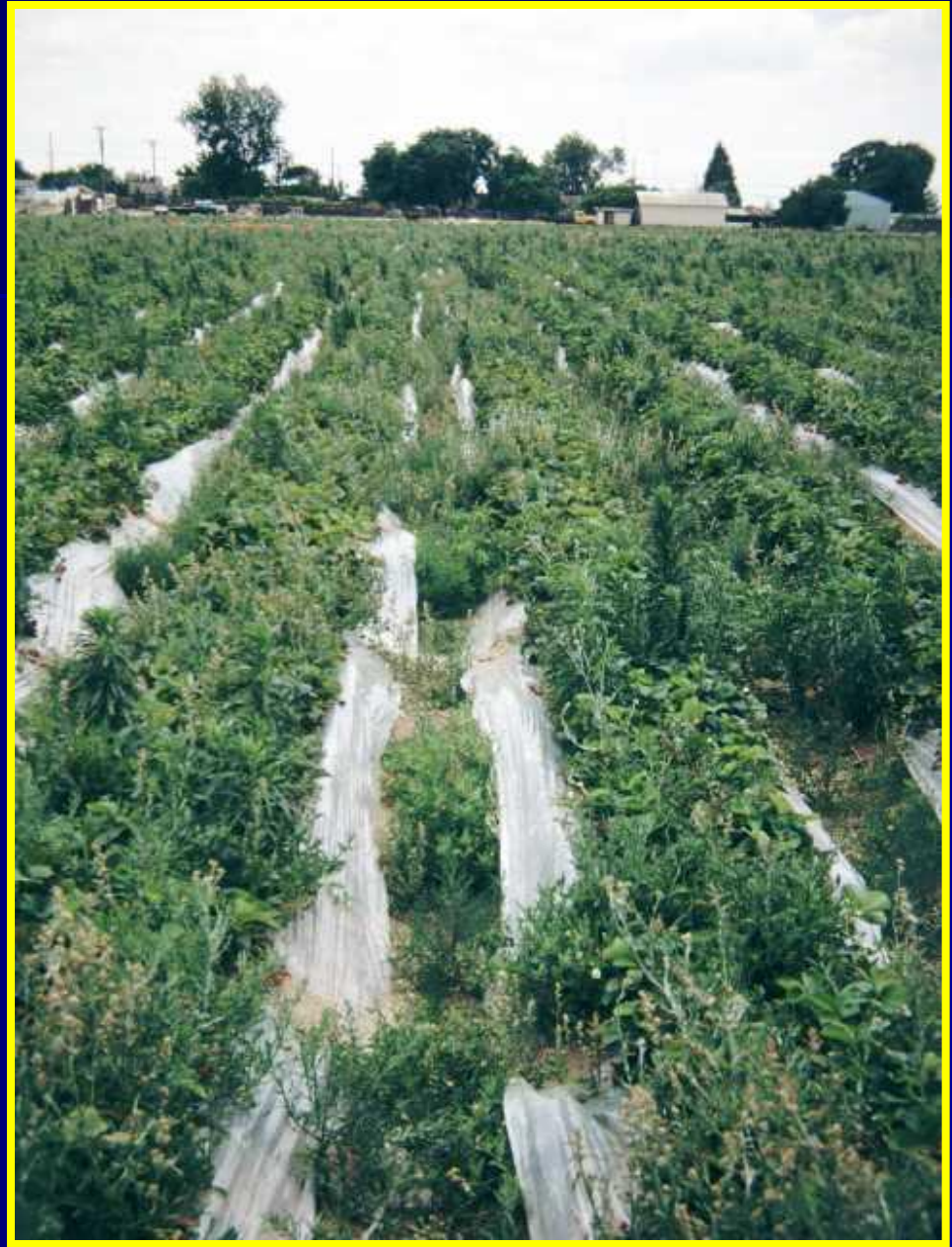


Plants from
non-fumed
nursery





**Nonfumigation
with poor
weed control**



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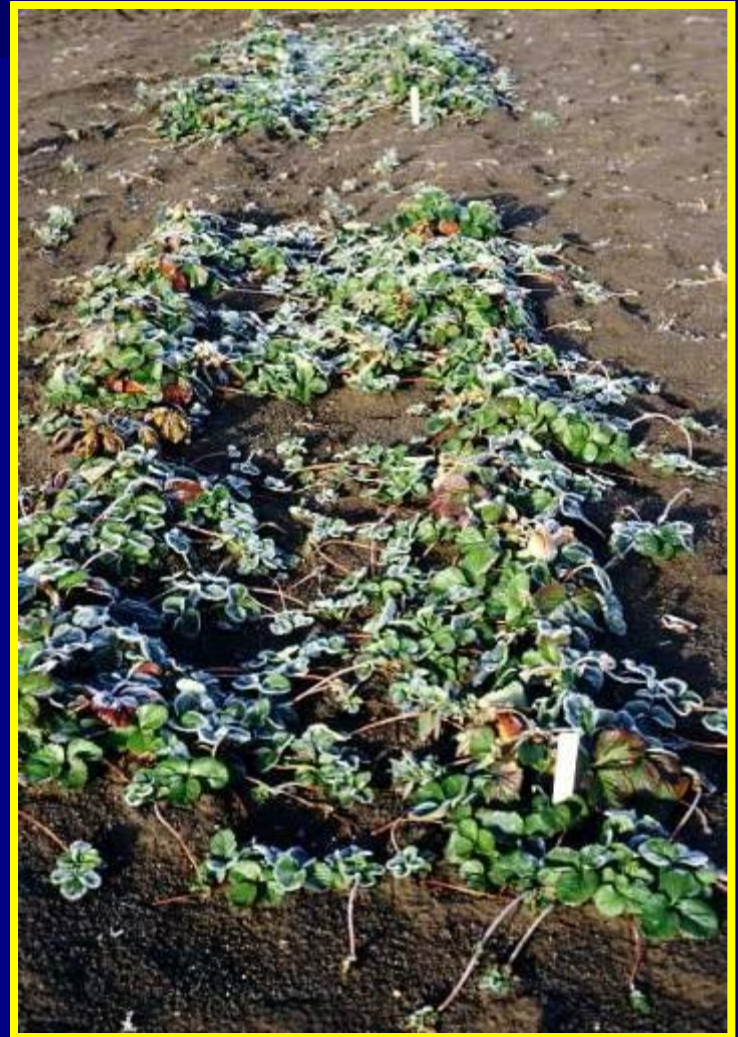
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Fumigated and non-fumigated runner nursery plots





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Plants from
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