Currants & Gooseberries

Chris McGuire
Two Onion Farm

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- Apples: 2 acres
- Currants, gooseberries: ½ acre
- Bedding plants
- Formerly vegetables
- Certified organic
- CSA, stores, other farms
- Fresh fruit, value-added products

Currant and Gooseberry Production

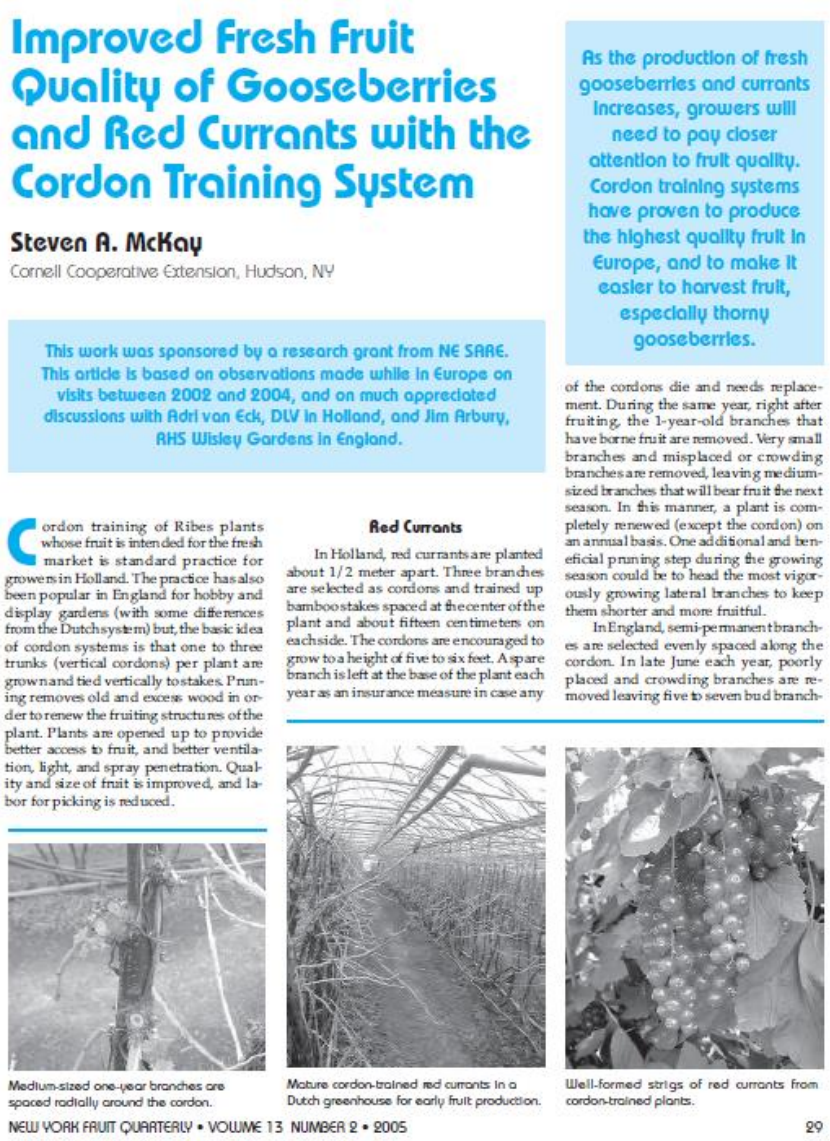
- Small planting 2012-2013
- Trialed until 2019
- Challenges:
  - Labor intensive harvest
  - Anthracnose leaf spot in gooseberry
- Half acre planted 2020

Topics

- Training & trellising
- Establishment costs
- Control of Anthracnose Leaf Spot
- Other pests

Freestanding Bush

- Traditional production method
- Winter prune to 4+ healthy canes aged 1 year, 2 year, and 3 years
- Low-cost, low-input
- Dense canopies
- Time-consuming harvest
- Reduced fruit quality
- More disease



Improved Fresh Fruit Quality of Gooseberries and Red Currants with the Cordon Training System

Steven A. McKay
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This work was sponsored by a research grant from NE SARE. This article is based on observations made while in Europe on visits between 2002 and 2004, and on much appreciated discussions with Adri van Eck, DLV in Holland, and Jim Arbury, RHS Wisley Gardens in England.

As the production of fresh gooseberries and currants increases, growers will need to pay closer attention to fruit quality. Cordon training systems have proven to produce the highest quality fruit in Europe, and to make it easier to harvest fruit, especially thorny gooseberries.

Cordon training of Ribes plants whose fruit is intended for the fresh market is standard practice for growers in Holland. The practice has also been popular in England for hobby and display gardens (with some differences from the Dutch system) but, the basic idea of cordon systems is that one to three trunks (vertical cordons) per plant are grown and tied vertically to stakes. Pruning removes old and excess wood in order to renew the fruiting structures of the plant. Plants are opened up to provide better access to fruit, and better ventilation, light, and spray penetration. Quality and size of fruit is improved, and labor for picking is reduced.

Red Currants

In Holland, red currants are planted about 1/2 meter apart. Three branches are selected as cordons and trained up bamboo stakes spaced at the center of the plant and about fifteen centimeters on each side. The cordons are encouraged to grow to a height of five to six feet. A spare branch is left at the base of the plant each year as an insurance measure in case any of the cordons die and needs replacement. During the same year, right after fruiting, the 1-year-old branches that have borne fruit are removed. Very small branches and misplaced or crowding branches are removed, leaving medium-sized branches that will bear fruit the next season. In this manner, a plant is completely renewed (except the cordon) on an annual basis. One additional and beneficial pruning step during the growing season could be to head the most vigorously growing lateral branches to keep them shorter and more fruitful.

In England, semi-permanent branches are selected evenly spaced along the cordon. In late June each year, poorly placed and crowding branches are removed leaving five to seven bud branch-

Medium-sized one-year branches are spaced radially around the cordon.

Mature cordon-trained red currants in a Dutch greenhouse for early fruit production.

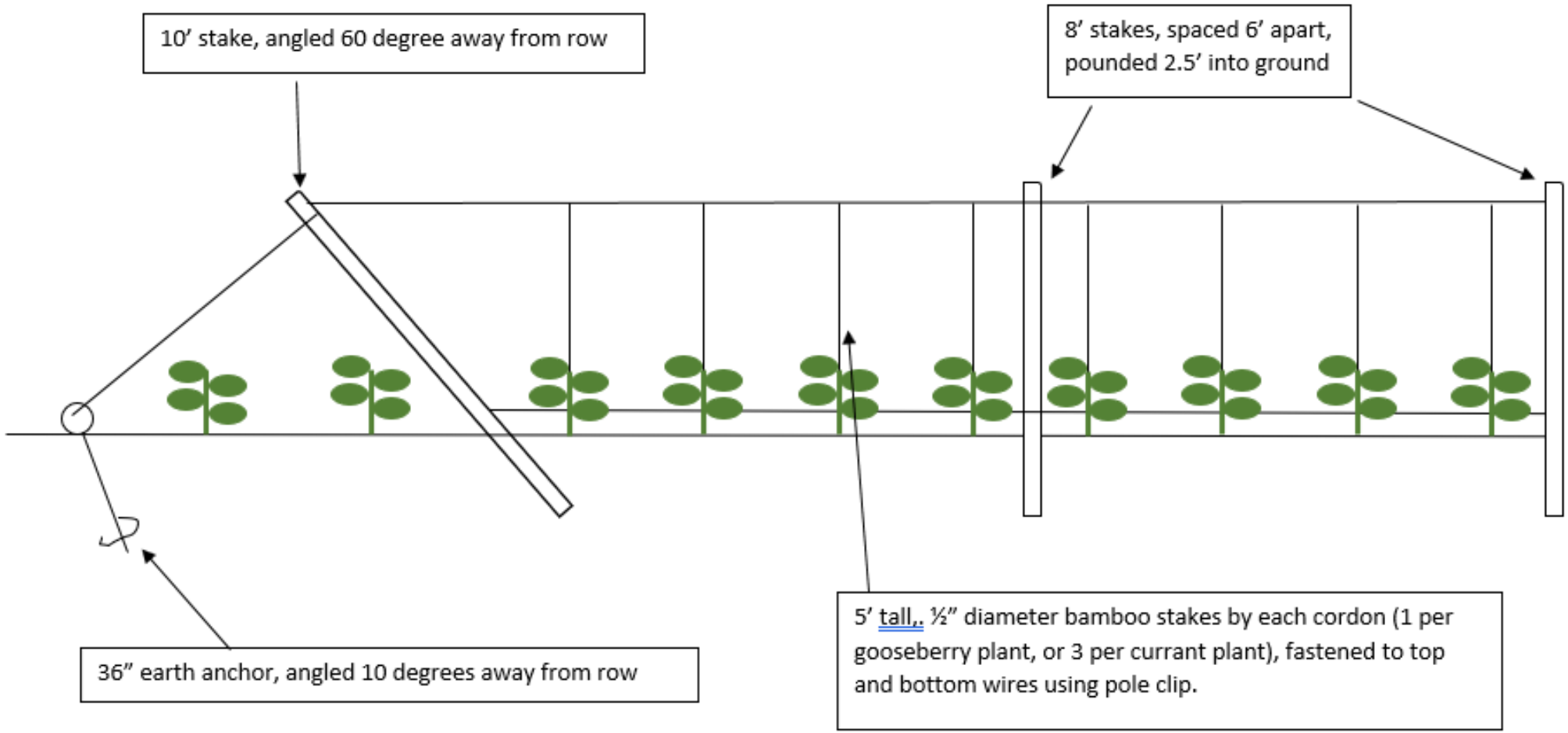
Well-formed strigs of red currants from cordon-trained plants.

Cordon Trellis Method

- Used in Northern Europe in fresh market plantings
- Benefits:
  - Fruit size & quality
  - Reduced harvest labor
  - Reduced disease
- Steven A. McKay. (2005). Improved Fresh Fruit Quality of Gooseberries and Red Currants with the Cordon Training System. New York Fruit Quarterly, Volume 13 Number 2

Trellis Technique

- “Cordon”: permanent vertical stem fastened to bamboo stake.
- Horizontal branches pruned and renewed each year after fruiting.
- Higher planting density: 18” vs 3’


10’ stake, angled 60 degree away from row
8’ stakes, spaced 6’ apart, pounded 2.5’ into ground
36” earth anchor, angled 10 degrees away from row
5’ tall,. ½” diameter bamboo stakes by each cordon (1 per gooseberry plant, or 3 per currant plant), fastened to top and bottom wires using pole clip.

Trellis Trial

- Cordon trellis vs. freestanding bushes
- Measure yields, labor, costs
- Four varieties each of currant and gooseberry

Trellised Currants

Untrellised vs Trellised Currants, Second Year

Captivator Gooseberry Harvest

Trellised plants:

- More uniform, earlier maturity
- Larger fruits
- No fruit on ground
- Harvest in half to two thirds the time
- Lower overall yield?

Establishment Costs for Currants, Preplant and Year 1

		Untrellised	Trellised
Labor (Hours / acre)	Trellis construction	0	126
	Planting	22	44
	Training plants	2	38
	Other	206	206
	Total	**230**	**415**

Materials ($/acre)	Trellis	$0	$9010
	Plants	$7665	$15330
	Irrigation, mulch	$1598	$1598
	Total	**$9262**	**$25938**

Anthracnose Leaf Spot of Gooseberry

- Leaf spots
- Massive early defoliation

No leaves!

Trialing Control Methods, 2021-2022

Trellised vs untrellised

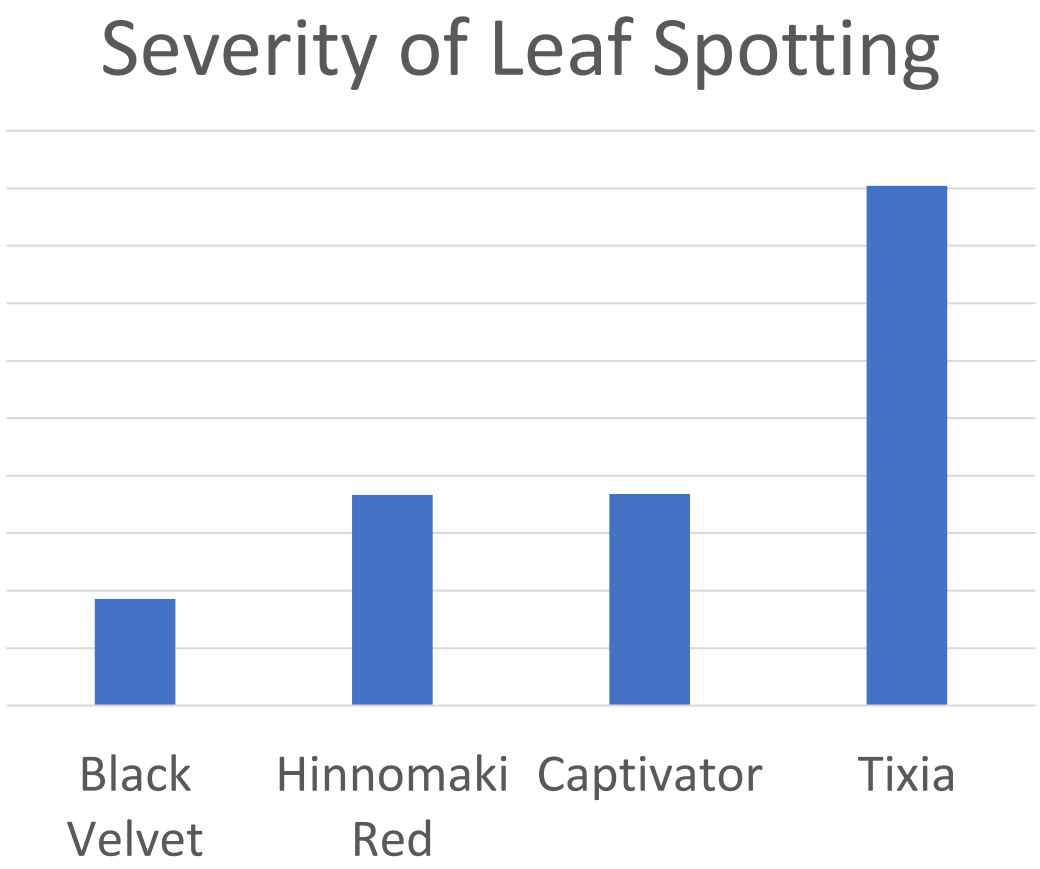
Four varieties

Organic sprays:

- Regalia (plant extract)
- Cueva (copper soap) + Double Nickel (beneficial bacteria)
- Carb-o-nator (Potassium bicarbonate)
- Untreated control

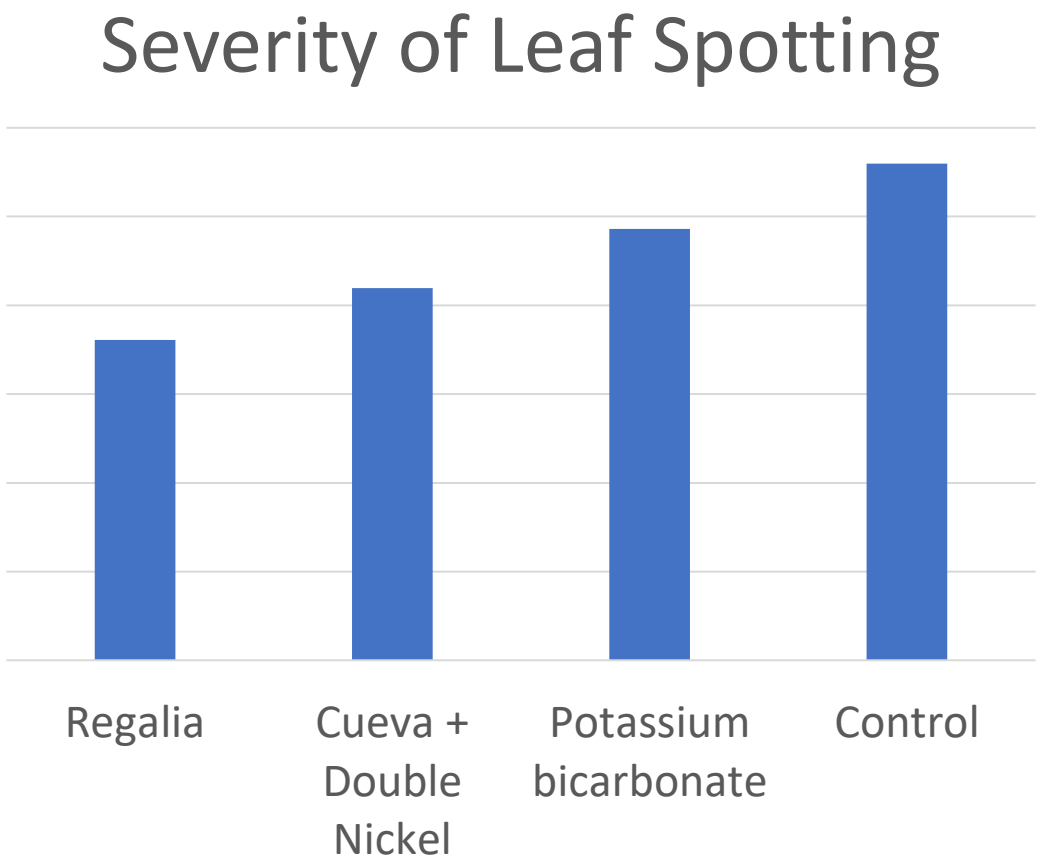
Preliminary Results

Variety Susceptibility



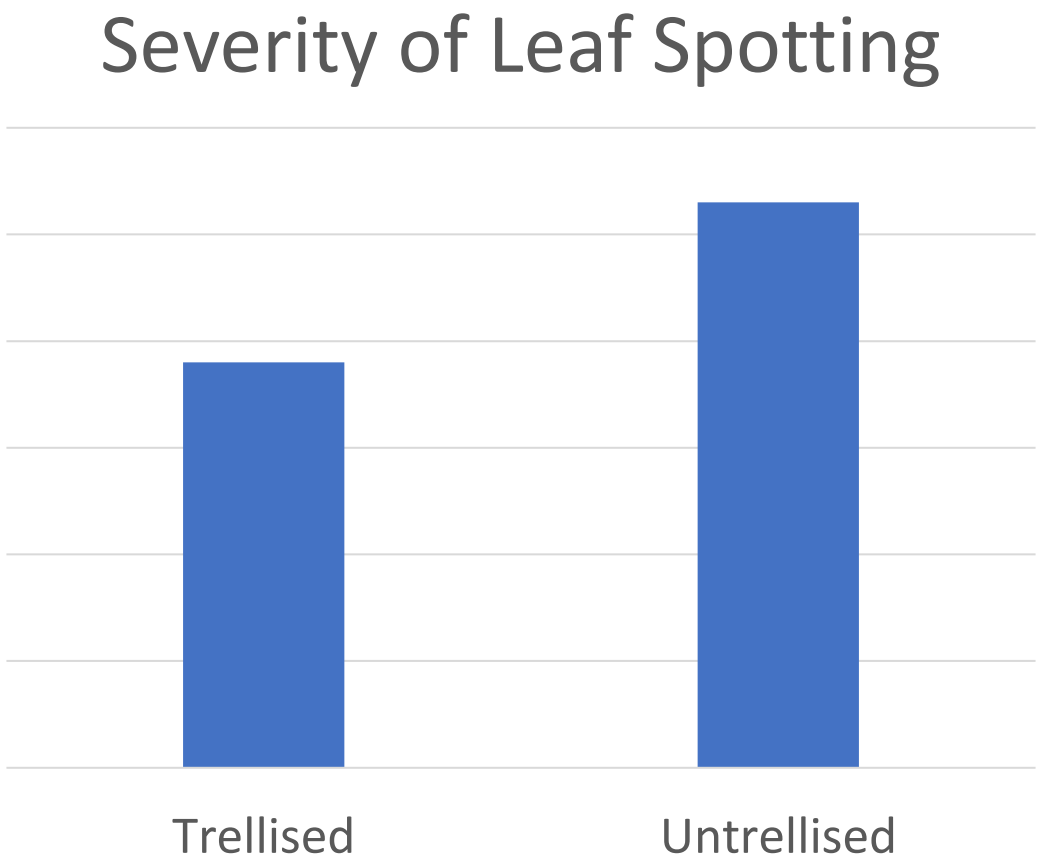
- Susceptibility of other varieties:
- High: Poormans
- Moderate: Pixwell, Jahn's Praire, Hinnomaki Yellow
- Low: Amish Red

Sprays


Severity of Leaf Spotting
Regalia
Cueva + Double Nickel
Potassium bicarbonate
Control


REGALIA
BIOFUNGICIDE
KEEP OUT OF REACH OF CHILDREN
CAUTION

Trellising



Currant Spanworm

Other Pests

- Powdery mildew (rare on our farm)
- Leafroller caterpillars
- Cluster cup rust

Questions?

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Cordon trellising research funded by USDA Specialty Crop Block grant