Transition to Organic Production—Horticultural Crops

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Overview—who is transitioning?

- During the period 2001-2004, the number of NYS farms certified by NOFA-NY increased from 187 to 231, a 27% increase.
- This is a rate of about 8% per year.
- Acreage is increasing at a higher rate.
- This does not include data from other certification agencies.
Overview—who is transitioning?

- Dairy farm numbers increased at a yearly rate of 12%
- Field crops farms—20%
- Horticultural crops farms, non-dairy livestock, maple syrup—2%
Changes in NOFA-NY Certified Farms

- Dairy
- Horticulture
- Field crops
- Other

- Leaving Certification Program
- Newly Certified
Overview—who is transitioning?

- New certified organic dairy, field crops farms have almost always transitioned from conventional
- New certified organic horticultural farms are usually “organic start ups” or organic farms that have previously not been certified
Overview—who is transitioning?

- The bottom line—in New York State, there are few horticultural farms transitioning to organic production.
- The same seems to be true for most of the Northeast and Ohio.
- This has not been the case on the West Coast!
Overview—who is transitioning?

- However—current organic farms are adding land, transitioning individual fields
- Certified grain farms are adding horticultural crops, especially processing vegetables
Overview—who is transitioning?

- Market incentives have not been strong for NE horticultural producers to transition
- This is changing:
  - Poor conventional concord grape and apple markets
  - Some good niche offers on the wholesale vegetable market
  - We can expect more transition in the future
Needs of Transitioning Horticultural Farmers

1. Logistical
2. Biological
3. Mental/social
4. Financial

After Matt Kleinhenz, Ohio St. U.
Logistical Needs

- Record-keeping
- Equipment
- Markets
- Support/information networks
- Certification—check out potential certifiers
- Check with extension service or consultants
Logistical Needs

- Suggestion—transition a relatively small part of your acreage first.
- A field that will comply with the 3-year rule most easily.
- Unfortunately, these are often poorer fields.
- Learn and practice on these fields; do not expect top results.
Logistical Needs

- Determine which pest controls you are likely to need and find approved sources.
- Your certifier and other farmers should assist you with the latter.
Biological Needs—Soil Building

- Test soil
- Correct pH
- Apply heavy rates of manure or compost as needed to bring nutrient levels into “high” range
Example—Bob Muth, NJ

- Already an outstanding soil manager
- Rotates conventional vegetables with 3 years of soil-building
- Hay crops, heavy applications of municipal leaves, cover crops
- It was easy for him to choose an isolated field on which to start organic production
- Started with a 6 acre field; 2 acres in cash crops
- Has bought 50 more acres for organic crops
Example—Rick Pedersen, NY

- Hog operation with 1200 acres of conventional crops
- 7 acre organic field in 2004, 30 acre transitional field
- Transitional corn was very good in 2004 due to manure application
This can be a major stumbling block
Learn from others; get equipment; practice cultivating
Learn to improve your rotation
Consider summer fallow on problem fields
Biological Needs—Insect Pests and Diseases

- Simple pesticide substitution does not work well
- Add cover crops and diversity to your rotation
- Use row covers
- Learn about other cultural methods—planting dates, resistant varieties, irrigation methods, etc.
Biological Needs—Insect Pests and Diseases

- Pesticides—choose those that are easiest on beneficials
- Be sure pest control products are approved!
Biological Needs—Rotation

- Increase your diversity of annual crops
- Learn to include cover crops
- Legumes can supply much of your needed nitrogen
Mental/Social Needs

- Be prepared to make basic changes in crop mix, rotation, markets
- Find a mentor or group of like-minded farmers with whom to share information and experiences
- “Each one, teach one”
- Have patience; you will make mistakes
Financial Needs

- Income will likely decline during the transition period, for whatever amount of land is under transition.
- Horticultural marketable yields will likely decline; some land may be in cover crops.
- Be realistic with how much you can afford.
- You will likely have to invest in new (to you) equipment.
Tree Fruit

- Consider transitioning a new-planted block to avoid selling transitional fruit with no premium.
- Be aware of borer, vole damage.
- Weed control is tricky—mowing, flaming, tillage, mulching.
- Probably best to start with larger rootstocks—lower investment, more reliable.
Tree Fruit

- Bearing trees—prefer scab-tolerant varieties
- Be prepared to hand thin
- Plan to use direct markets or reliable wholesale markets
- Have good use for low-grade fruit, ie. cider
- Weed and pest pressure will increase after first year
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Tree Fruit

- Be familiar with organic spray strategy and approved rescue treatments before you start.
- For direct markets, consider a wide range of offerings including processed products, other fruit, pumpkins, fall vegetables, etc.
Berries

- Weed control is a major issue. Consider annual strawberries, mulching, possibly flame weeding
- Harvest cost is very high for blueberries and raspberries. Consider U-pick.
- Keep quality very high and don’t be afraid to charge high prices. Use half-pint containers.
- Post harvest handling is very important. Cool berries right away; control botrytis
Berries

- Frozen berries may be a good product for over-winter marketing
- Become familiar with rescue treatments
Grapes

- Buffer area is a big issue in New York
- Some varieties are sensitive to sulfur fungicide sprays
- Need more research on best weed management, fertility, cover crops
Bicarbonate Products--Powdery Mildew Efficacy

Number of Recent Studies

Crop: apple, blueberry, cherry, grape, lettuce, muskmelon, peach, pumpkin, strawberry

- Good
- Fair
- Poor
Serenade Efficacy

- Apple fruit rots
- Apple fireblight
- Cherry pm
- Cranberry fruit rots
- Grape botrytis
- Grape downy mildew
- Grape phomopsis
- Grape pm
- Peach bacterial spot
- Peach brown rot
- Peach pm
- Raspberry botrytis
- Strawberry botrytis

The graph shows the number of recent studies for each fruit disease and the level of efficacy: good (blue), fair (purple), and poor (yellow).
Vegetables

- Transition a small percentage of your land each year until you become confident
- Visit other organic veg farmers; examine cultivation equipment and methods closely
- Be prepared to till under and replant if weeds or pests get out of control
- Have commonly-used, approved pest control products on hand, such as Bt. Find reliable quick sources for others.