Insights from a French apples grower

Looking back at 2 years of conversion to organic growing
Philippe Rothgerber, Strasbourg area, France
Why organic?

A family history...

✓ Grew up next to grand parents caring about a healthy nutrition

✓ And next to a father who tried to grow healthy apples thus reducing the use of chemicals as much as possible
  ✓ Member of an IOBC controlled IPM organization in the early 70’s: COVAPI
  ✓ Teaching me to use organic certified fertilizers and use organic alternatives to chemicals where available...
  ✓ Trying to do at best of knowledge standards he was taught...
  ✓ And finally dying affected by many cankers (skin, prostate, leukaemia, and finally a very fast growing cerebral tumour...)
Why organic?

A family history…

And most important ever: I was always taught to respect the Creator from whom we got all things as an old book tells us:

If you pay attention to these laws and are careful to follow them, then the Lord your God will keep his covenant of love with you, as he swore to your ancestors. He will love you and bless you ... He will bless the crops of your land — your grain, new wine and olive oil — the calves of your herds and the lambs of your flocks ...

The Bible, Deuteronomy 7:12 and 13 (NIV)
And what now?

We’re still farmers in a real world...
Costs of organic...

What has increased?
(1.) Pleasure to grow apples 😊

2. Weed management
   - more time needed
   - expensive machinery

but how about hidden costs of conventional control by chemicals?
Costs of organic...

What has increased?
Estimated rising costs / ha
- Machinery: estimated 1000€ to 1500€ /ha
- Work (manual weed control): estimated 500€/ha
- Additional work for mechanic weed control: estimated around 500€/ha

Total increase: 2000€ to 2500€/ha/year
Costs of organic…

What has decreased?
1. Chemicals

2. Cost and efforts for “pest” and “disease” control
   (IBMA and the member companies are working hard to make this possible…)
Costs of organic…

What has decreased?

1. Chemicals:
   a. Thinning, estimated 200€/ha
   b. Insecticides: 50€/ha
   c. Fungicides: 100€/ha

2. Thinning work: estimated 500€/ha

Total: **850€/ha** for 2015
Apple thinning, year 2015:

<table>
<thead>
<tr>
<th>Our farm (organic)</th>
<th>Neighbor (IPM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lime sulfur against scab</td>
<td>PRM 12 + ATS + Rhodofix + MaxCell + …</td>
</tr>
<tr>
<td>With those programs we had to add following costs:</td>
<td></td>
</tr>
<tr>
<td>1000 €/ha hand thinning</td>
<td>1500 €/ha hand thinning</td>
</tr>
</tbody>
</table>
For example:

Aphid management 2015

3 treatments for organic regulation
1. Mineral oil at vegetation start
2. Neem extract before bloom
3. Neem extract after bloom
After bloom the aphid population was growing, growing and growing...
... then came discouragement and fear...

and even more aphids
And finally, when all my knowledge came to an end...

I saw this nice Aphidoletes aphidimyza coming to the rescue.
Back to the example:

Aphid management 2015

3 treatments for organic regulation
1. Mineral oil at vegetation start
2. Neem oil before bloom
3. Neem oil after bloom
4. Natural regulation 😊

Compared to tank mixtures and chemicals:
1. Mineral oil at vegetation start + some kind of chemical (it has to work)
2. Pyrimicarbe before bloom ← not registered anymore in France
3. Spiroteramate after bloom (we always got a big thank you from bees)
4. Some treatment again in summer
5. Natural regulation ← this won’t exist that much anymore 😞

This makes it easy to compare costs...
And now?

For me farming is:

• Never saying « can’t » or « impossible »
• Always look ahead, work as if todays science would be tomorrows big lie, thus respecting todays knowledge...
• Always being ready to be humble and watch the richness of God’s creation, moving forward with latest discoveries and having in aim not to disrupt nature...
Finally my thanks for support go to:
- OPABA
- FREDON Alsace
- Beratungsdienst Oekologischer Obstbau e.v.
  and Foeko
- Chambre d’agriculture Alsace
- Friends and scientists from all over everywhere
I love to think of nature as an unlimited broadcasting station, through which God speaks to us every hour, if we will only tune in.

George W. Carver