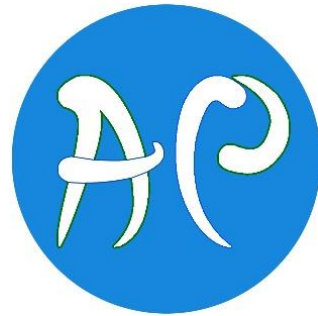


Setting up and operating an aquaponics farm in Europe: how research could better cater for the needs of SMEs

by Agnès JOLY, co-founder AQUAPRIMEUR, France



COST FA1305 International Conference: « Aquaponics Research Matters »
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Look at the 10 (?) European SMEs now selling produce


Research has
mattered

- Urban farmers
- Svinna
- Desert Aquaponic
- Ponod
- Tilamur

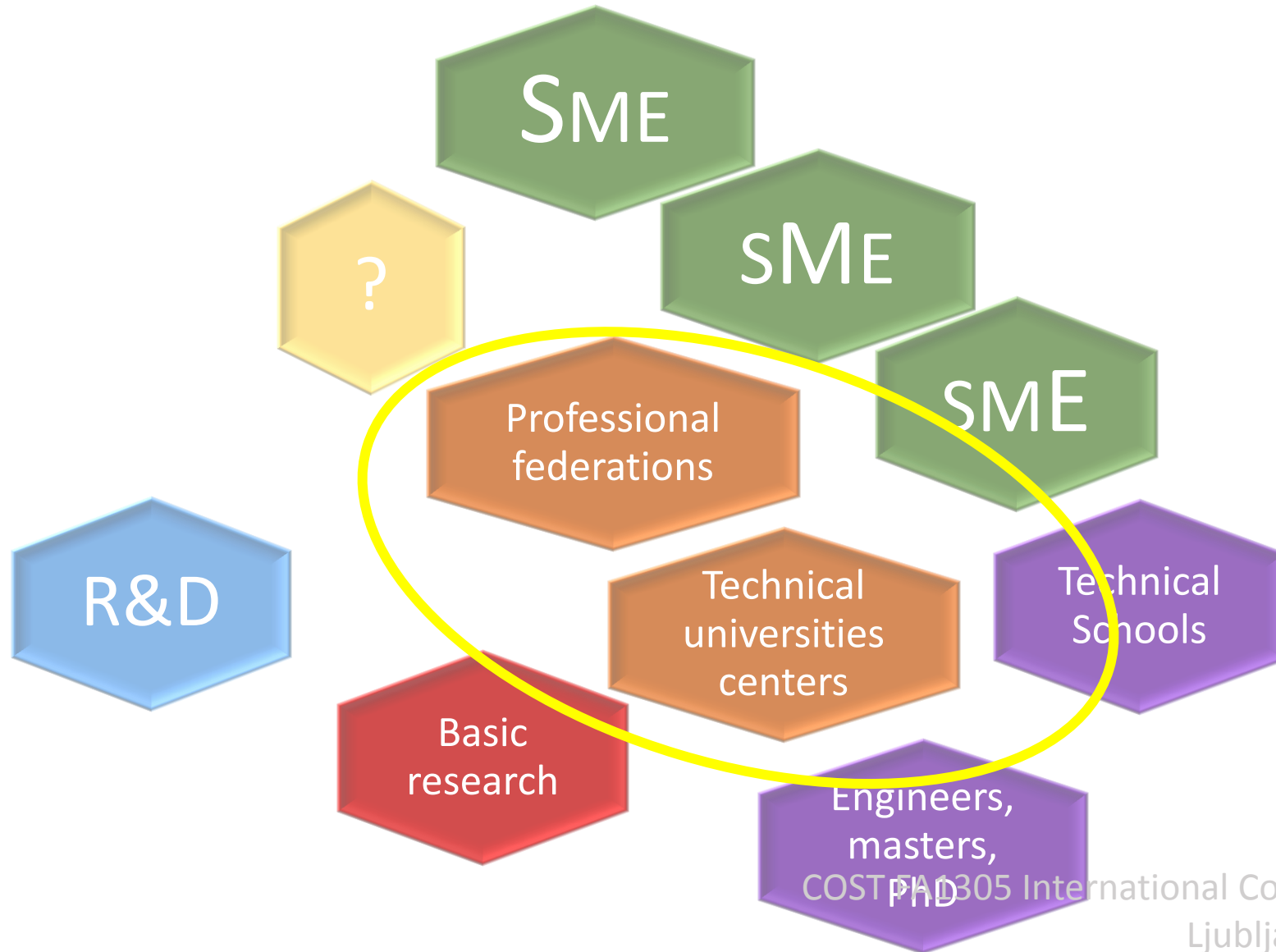
or not, not much
(not yet?)

- Bioaquafarm
- Breen
- ECF
- and lots of small projects

Aquaponics is different + All the usual difficulties SME/Research

- Lots of NIMA 
- Philosophy as a motivation
- Lots of DIY
- Less capital
- Research is recent
- Not much result available
- Time to answer / time of publishing
- Nb of cycles / Nb of replicates
- Procedure / Result
- Commercial size / Research unit
- Financing / Confidentiality / Publishing
- Tours, courses, woofing, network

YES we can better work together!



- Involve technicians sector
- On-site tests
- COST website
- European SMEs federation

Successful examples and existing Tools

They've done it!

- INAPRO: Tilamur
- ECOPONICS: Svinna, Breen, IGFF
- Rostock University: dissemination to SME
- ARDA association => 1 site created in La Reunion Island
- APIVA in France: networking and dissemination

National/European Tools

- Horizon2020
 - Phase 1,2,3
 - Dedicated SME instrument 2016-2017
 - Research & Innovation actions for SMEs
- Marie Curie
- National projects supported by EMFF and EAFRD

WHAT topics for research?

- Company set-up in practice: authorisations, financing, key figures, assistance
- Software to plan facilities and management, and anticipate business
- True aquaponics or 2 systems
- Cheap infrastructure
- Best couples fish/plants for given climate and best seeds
- How to use solids: sludge removal, thickening, mineralisation,...
- Supplementing water
- Automated management tool, Decision support
- HACCP safety risk assesment and solutions
- Vegetable produce safety in case pathogens in water
- Integrated pest management
- Training of employees
- Advantage for plant growers to switch to aquaponic
- Benefit for RAS fish growers to include aquaponics
- Specific bacterial microflora, root biofilms
- Mutual benefits as for safety, animal welfare and pathogen resistance, resilience, micronutrients
- Crop quality: nutrients in vegetables, organoleptic comparison

Thanks to

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Pierre Foucard, **ITAVI Institute**
- GERMANY Harry Palm, **University Rostock**
- ICELAND Ragnheiður Þorarinsd., **Svinna**
- ISRAEL Adrian Barnes, **Desert Aquaponics**
- MALTA Tamas Bardocz, **AquaBioTech**
- SLOVENIA Vesna Milicic, Matej Leskovec, **Ponod**
- SPAIN Mariano Vidal, **Tilamur**
Fernando Sustaeta, **Breen**
- SWITZ. Andreas Graber, **Urban Farmers**
Ranka Junge, **University Zurich**
- UK Amanda & Antonio, **Bioaquafarm**

Enlarge that preliminary study?
Contribute to a paper?

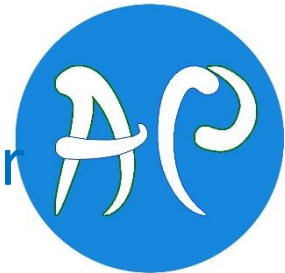
Contact me about you being an SME
your helping SMEs



- Agnès JOLY

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*A happy ladybird, on an Aquaprimeur mustard,
in Paris, march 2016*