

More sustainable, resilient, and competitive food systems through the development of intermediate food value chains



PRACTICE ABSTRACT No: 13

Fermentation of agro-foods co-products: an alternative to chemical inputs

In order to move towards less polluting agriculture, the substitution of chemical inputs such as plant protection products by ecological and innovative products is relevant. Here we propose to farmers and processors of fruits and vegetables to substitute all or part of synthetic inputs by new bio-based products.

The proposition here lies in the implementation of new products ranges issued from the bio-fermentation of plant coproducts. Through fermentation, the plant co-products are enriched with active principles, whose properties will be exploited. These active principles are already recognized and used in and by nature for their bio-preservation and bio-stimulation virtues (reduction of patulin, diminution of the effects of molds that contribute to the destruction of fruits and vegetables, etc.). These new bio-based-products are intended to be used in the formulation of alternative inputs to chemicals and/or of fossil origin.

Two application cases are proposed:

- Alternative and ecological inputs to phytosanitary products of the pesticide family, usually used for the eradication of crop pests,
- Protection or bio-stimulation treatments of plants, from seed to harvest and storage.

The application concerns producers and processors of fruits and vegetables (market gardeners, farmers, fruit cooperatives), and represents a great advance towards a more environmentally friendly agriculture.

Authors

Jean-Marc Tendon
Clément Gindrat

Affiliation

Cogiterre Sàrl

Contact

c.gindrat@cogiterre.ch

jm.tendon@cogiterre.ch

End Users

Farmer & Cooperative & partners

Country

Switzerland



FAIRCHAIN project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101000723.

More sustainable, resilient, and competitive food systems through the development of intermediate food value chains



PRACTICE ABSTRACT No: 13

Links for additional information



[FairchainEU](#)



[FAIRCHAIN EU](#)



www.fairchain-h2020.eu

All Practice Abstracts prepared by FAIRCHAIN can be found [here!](#)

ABOUT FAIRCHAIN

The FAIRCHAIN project launched in 2020 and coordinated by INRAE, is developing intermediate food value chains in the fruits and vegetable and dairy sectors. Through technological, organizational and social innovations and by developing business models FAIRCHAIN will enable small and mid-size stakeholders to scale up to supply fresh, sustainable and high-quality food products to consumers at a regional level.

FAIRCHAIN PARTNERS



DISCLAIMER

This Practice abstract reflects only the author's view. The FAIRCHAIN project is not responsible for any use that might be made of the information it contains. Licenced under: [CC BY 4.0 DEED](#)



FAIRCHAIN project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101000723.