Botanical plant production agent from Larix by-products

Background:
- FP7 ForestSpeCs (2009-2012)
- Result: Potential use of extracts from Larix sp. in plant disease control identified

Funding scheme of Prolarix:
‘Boosting the translation of FP projects' results into innovative applications in the field of agriculture, forestry, fisheries and aquaculture Plant High Value Products - from discovery to final product’ THEME [KBBE.2013.1.4-07 KBBE.2013.3.1-01]:

Submission: February 2013
Running time: 1 November 2013 - 31 October 2015.

This project has received funding from the European Union’s Seventh Framework Programme for research, technological development and demonstration under grant agreement no 613600.
Overall objective: To facilitate the market introduction of an innovative plant protection product made from by-products of the European forest industry.

Approach:

(i) Optimize extraction and up-scale the production of standardized technical grade Larix extract (‘Larixyne’).

(ii) Validate efficacy and demonstrate its value as a plant protection product.

(iii) Protect IP appropriately.

(iv) develop a roadmap for the development of a full registration dossier and capture of the market.
Achievements of ProLarix:

• Methods for qualitative and quantitative chemical analysis of Larix constituents (‘Larixyne’) developed.

• High-yield sources of raw material identified.

• Technical grade extract defined.

• Optimized formulation of a.i. developed.

• Scalable extraction of Larixyne developed and piloted.

• Efficacy of formulated Larixyne under field conditions demonstrated.

• IP protection strategy developed and implemented (including patenting and brand name protection).

• Roadmap to registration and market introduction developed.

• SME Trifolio GmbH enabled to develop Larixyne into a valuable and resource-efficient commercial product.
Challenges and opportunities encountered

• Close multi- and transdisciplinary collaboration necessary

  chemistry

  plant pathology

  SME: large scale extraction, formulation, production of PPPs and marketing

• Short duration of project (2 years): no room for errors and delays major challenge

• Close collaboration of academia and industry:
  - cultural differences
  + fruitful exchange for both sides

• The EU funding scheme served its purpose and is a valuable tool

SME: registration of plant protection products
Outlook/Roadmap to market

- Time of market entry (best case): 2022
- Additional investments until market entry: 5-10 M Euro
- Additional R&D in final production and product development
- Profitability and market access strongly influenced by agricultural policy

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