

Fiber hemp industrial chain for the production of functional food and animal feed additives - CATERPILLAR

Riferimenti

Tipo di progetto

Gruppo Operativo

Acronimo

CATERPILLAR

Tematica

Agricoltura biologica

Information

Time frame

2020 - 2021

Durata

12 months

Partners (no.)

8

Regione

Emilia-Romagna

Comparto

Colture industriali

Localizzazione

ITH51 - Piacenza

ITH52 - Parma

Costo totale

€213.609,17

Fonte di finanziamento principale

Programma di sviluppo rurale

Programma di sviluppo rurale

2014IT06RDRP003: Italy - Rural Development

Programme (Regional) - Emilia Romagna

Parole chiave

Farming/forestry competitiveness and diversification

Supply chain, marketing and consumption

Biodiversity and nature management

Waste, by-products and residues management

Food quality / processing and nutrition

Sito web

<https://www.gocaterpillar.it/>

Project status



Objectives

The Plan is based on organic cultivation of monoecious hemp, enhancing its maximum potential by the generation of new high added value products and by-products. Seeds will be used for the production of oil and flour; stalks, for the production of fiber and shives. Oil and flour will be used for new functional and gluten-free foods formulations. Stalks water retting will be carried out in a prototype bioreactor. *Hermetia illucens* larvae will be fed with biofilm and pectic substrate on retted fibers, thus incrementing their biomass that will be investigated for the production of feed industry additives

Activities

Test plot and field trials aimed to the comparison of crop performance by organic farming in different environments (flatland vs hilly and inner lands). Seed harvesting, drying and pressing by a prototype engine aimed to the identification of the best pressing condition to preserve organoleptic, nutritional and durability properties of hemp oil and flour (panel). Hemp stalk retting by a prototype bioreactor and retted fiber cleaning by *H. illucens* larvae feeding; recovery of larval biomass. Hemp food products (oil and panel), and larval biomass characterization, and development of new bread "gluten free" formulations for food industry; production of additives for feed industry by larval biomass.

completed

Partenariato

Role	Azienda	Address	Telephone	E-mail
Leader	Open Fields	Strada Consortile 2 43044 Collecchio PR Italy	0521 803222	r.ranieri@openfields.it
Partner	Agriform s.c.a.r.l.	Via Torelli 17 43123 Parma PR Italy	0521 244785	info@agriform.net
Partner	Azienda Agricola Ca' d'Alfieri di Sgarbossa Luisa	Località Predario, 29 43032 Bardi PR Italy	0525 771714	info@cadalfieri.it
Partner	Azienda Agraria Sperimentale Stuard S.c.r.l.	Via Madonna dell'Aiuto 7/A 43126 San Pancrazio PR Italy	0521 671569	stuardscrl@arubapec.it
Partner	CREA - Genomica e Bioinformatica	Via San Protaso 302 29017 Fiorenzuola d'Arda PC Italy	0523 983758	vitamariacristiana.moliterni@crea.gov.it
Partner	Naturfibre	Via Belvedere n. 9/A, 56035 Casciana Terme Lari PI Italy	0351 8384292	cesare.tofani@naturfibre.it
Partner	Societa' Agricola Pedrazzi	Via Varone n. 15 43047 Pellegrino Parmense PR Italy	329 0663912	pedrazzi78@gmail.com

CAnapa TEssile peR la Produzione di aLimenti funzionaLi e di biomAsse pRoteiche per l'alimentazione animale - CATERPILLAR

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<https://www.innovarurale.it/pei-agri/gruppi-operativi/bancadati-go-pei/canapa-tessile-la-produzione-di-alimenti-funzionali-e-di>

Role	Azienda	Address	Telephone	E-mail
Partner	Università degli Studi di Parma	Via Università, 12 43121 Parma PR Italy	0521 905885	gianni.galaverna@unipr.it

Pratiche abstract
Link utili

Titolo/Descrizione	Url	Tipologia
Sito web del progetto	https://www.gocaterpillar.it/	Sito web
Evento finale del progetto	https://www.gocaterpillar.it/convegno-finale-caterpillar-5-maggio-2023/	Link ad altri siti che ospitano informazioni del progetto