

Scheda Proposta Progetto

CIP YZWKNO

Dati proposta

Acronimo

BYOPOLYCENE (rev.1)

Titolo

A POLYSCHEME, CROSS-SECTORAL FRAMEWORK TO VALORISE BIODIVERSITY INTO A NOVEL ASSET CLASS FOR RESILIENT FOOD SYSTEMS

Durata in mesi

48

Descrizione

Resilient European food systems depend on thriving agrobiodiversity; however, intensive monocultures and systemic market failures

are driving severe genetic erosion. The primary bottleneck hindering the mainstream adoption of diversified farming is the perceived

financial and agronomic risk by farmers, compounded by severe logistical barriers in processing and storing non-conventional crops.

BioPolycene aims to definitively de-risk this transition by developing a cross-sectoral framework that valorises agrobiodiversity into

a measurable, financially viable asset class.

To achieve this, the project introduces three core innovations. First, a TRL 4 Digital Nexus Twin and Decision Support System

(DSS) that integrates field-level biodiversity data—including soil microbiomes, crop wild relatives, and genetic diversity—to

explicitly simulate the agronomic trade-offs, yield stability, and pest resilience of crop diversification. Second, the co-design of

"PolySchemes," which are innovative, blended socio-economic models that combine public CAP subsidies with private Nature

Credits and premium market pricing to create robust financial safety nets for farmers. Third, the formulation of tailored post-harvest

processing, storage, and market pathways to overcome supply-chain bottlenecks and successfully commercialise neglected and

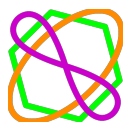
underutilised species.

These solutions will be co-developed and empirically validated through 4 cross-border Multifaceted Live Case Studies across 8

European countries, strictly applying a Multi-Actor Approach. Ultimately, BioPolycene will deliver scalable socio-economic and

digital tools to regional and EU policymakers, seamlessly aligning with the EC Knowledge Centre for Biodiversity and the EU

Vision for Agriculture, thereby empowering land managers to restore ecosystem resilience while securing food production and



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competitive livelihoods.

Stato INVIATA
Proponente BRANCA, Ferdinando
Struttura proponente DI3A
Ambito INTERNAZIONALE
Ente finanziatore HORIZON-RIA
Bando di riferimento HORIZON-CL6-2026-01-BIODIV-06
Capofila ARISTOTELIO PANEPISTIMIO THESSALONIKIS
Partner

Dati economici

Costo complessivo € 5.990.000
Finanziamento complessivo atteso € 5.990.000
Finanziamento previsto UNICT € 405.075
Cofinanziamento previsto UNICT € 0

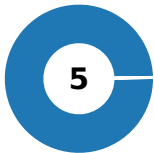
Componenti (5)

#	Nominativo	Ruolo	Carriera**	Struttura	ERC	Ore*
1	BRANCA, Ferdinando	RESP_SCIENTIFICO	PO	DI3A	LS	1.500
2	LEONARDI, Cherubino	COMPONENTE	PO	DI3A	LS	150
3	MAURO, ROSARIO	COMPONENTE	PA	DI3A	LS	150
4	ROMANO, Daniela Maura Maria	COMPONENTE	PO	DI3A	LS	150
5	TRIBULATO, ALESSANDRO	COMPONENTE	RU	DI3A	LS	150

* ore stimate

** PO - Professore Ordinario; PA - Professore Associato; RD o RM - Ricercatore TD; RU - Ricercatore

Distribuzione componenti per struttura



■ DI3A: 5 (100%)