

11-12 FEBRUARY 2025

RABAT, MOROCCO

Institut Agronomique et Vétérinaire Hassan II



WEFE NEXUS INTERNATIONAL CONFERENCE

**EXPLORING AND BRIDGING NEXUS FOR
A SUSTAINABLE FUTURE**



These projects are part of the
PRIMA programme supported
by the European Union.

WEFE NEXUS INTERNATIONAL CONFERENCE

Day 2 – 12th February 2025

PILLAR 3: WEFE NEXUS SOLUTIONS

INNOVATIVE SOLUTIONS SHOWCASING DEMONSTRATION CASES FROM BONEX/SURENEXUS



DP SPAIN
La Axarquía

Dr Rafael Casielles
Senior R&D Project Manager
BIOAZUL-Spain



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The BONEX project – A general overview

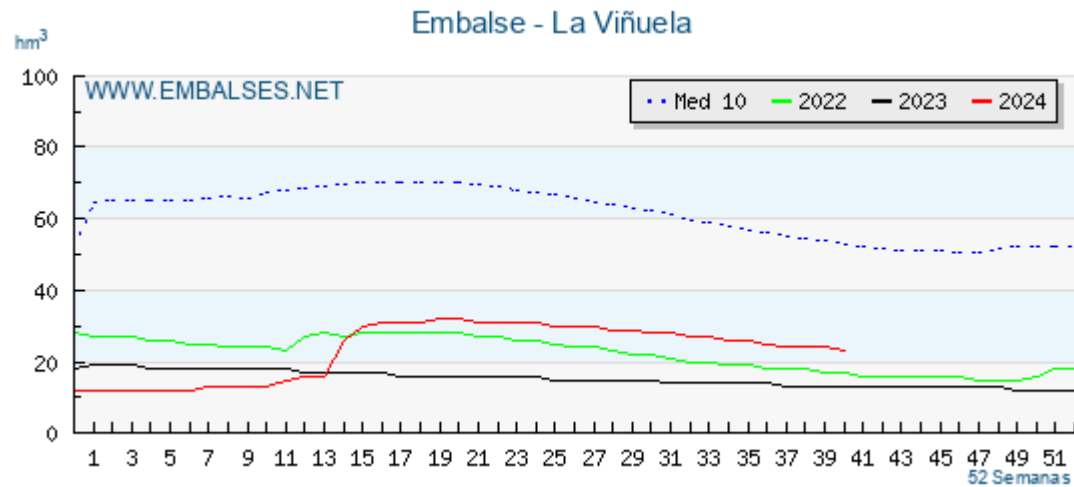
Rafael Casielles (BIOAZUL)



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DP Spain - Axarquia

- Acute water Scarcity (shortages in households and farming)
- Growing of sub-tropical crops: main economic driver
- Farming land extended in last years
- Competition with tourism for water resources
- Need to explore non-conventinoal resources



RICHWATER PROJECT

- Membrane Bioreactor (MBR) for water reclamation
- Main concern: Social acceptance
- ETV verification
- Stakeholder demand: Agronomic studies
- Living Lab included in Water Europe Atlas of Water Oriented Living Labs (WOLLs)
- Strong stakeholder engagement (bottom-up)



BONEX DEMONSTRATION

- LL success: great investment on RW
- Focus on nutrient management
- Common practice: keep fertiliser dosages
- Development of DSS tool
- Monitoring of nutrients
- Experimental site: Show case
- Strong link with stakeholders

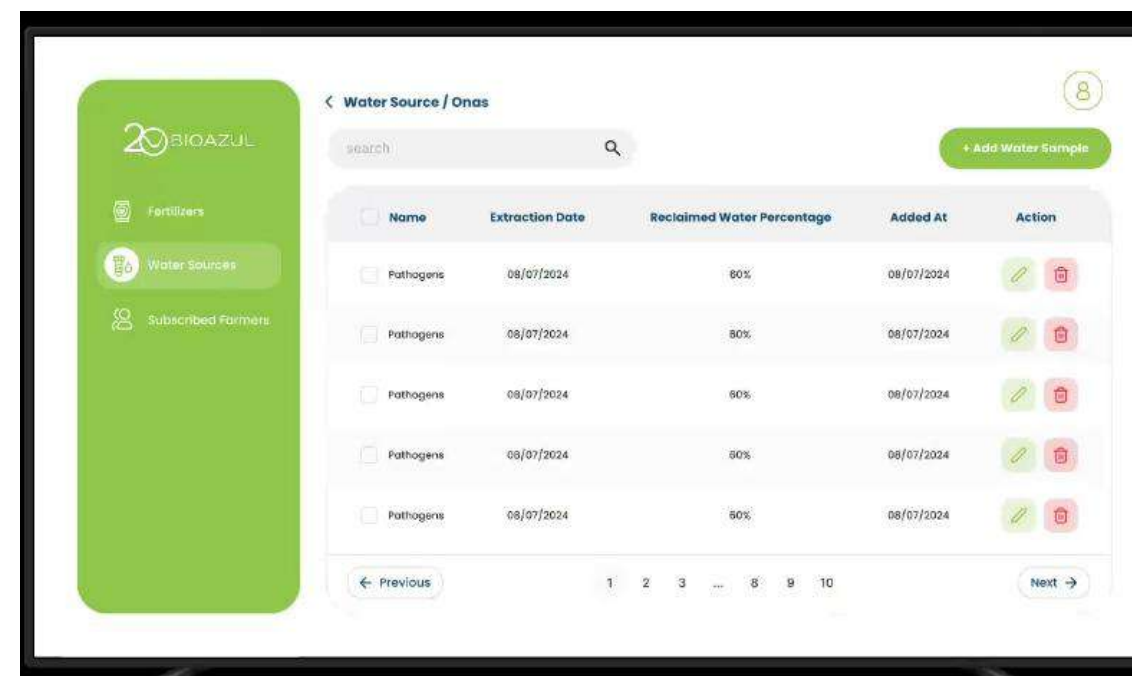


Decision support system – Nutrient balance

1. Experimental plot													
Text string		Text string		1.1. Crop information		Natural number							
Crop		Variety		Number of trees									
Mango		Osteen		60									
1.2. Fertilization (g/tree)													
Fertilizers	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	total
Potassium Nitrate (13-0-46)	0	0	0	9	9	9	9	9	9	0	0	0	54
Ammonium Nitrate (34.5%)	0	0	0	9	9	9	9	9	9	0	0	0	54
Calcium Nitrate (15.5-0-0-26)	0	0	0	12	12	12	12	12	12	0	0	0	72
Calcidor magnum	0	0	0	24	24	0	0	0	0	0	0	0	48
Iron Chelate (6%)	0	0	0	4	4	0	0	0	0	0	0	0	8
Optibor (17.5%)	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc sulfate (20-8)	0	0	0	0	0	25	0	0	0	0	0	0	25
1.3. Fertilization (€/month per tree) [Standard fertilization]													
Fertilizers	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	total
Potassium Nitrate (13-0-46)	0	0	0	0,01	0,01	0,01	0,01	0,01	0,01	0	0	0	0,06
Ammonium Nitrate (34.5%)	0	0	0	0,01	0,01	0,01	0,01	0,01	0,01	0	0	0	0,04
Calcium Nitrate (15.5-0-0-26)	0	0	0	0,01	0,01	0,01	0,01	0,01	0,01	0	0	0	0,05
Calcidor magnum	0	0	0	0,05	0,05	0	0	0	0	0	0	0	0,11
Iron Chelate (6%)	0	0	0	0,03	0,03	0	0	0	0	0	0	0	0,06
Optibor (17.5%)	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc sulfate (20-8)	0	0	0	0	0	0,04	0	0	0	0	0	0	0,04
Total	0	0	0	0,11	0,11	0,07	0,03	0,03	0,03	0	0	0	0,37
1.4. Nutrients crop demands based on the standard fertilization													
Month	N	P2O5	K2O	CaO	Fe	B	MgO	S	Zn				
January	0	0	0	0	0	0	0	0	0				
February	0	0	0	0	0	0	0	0	0				
March	0	0	0	0	0	0	0	0	0				

Conversion from fertilizers to
Every value here has to be

- Exact dosage of fertilisers
- Adapted to sub-tropical crops
- Economic analysis
- Validation in real farms





**SURE
NEXUS**



PRIMA
PARTNERSHIP FOR RESEARCH AND INNOVATION
IN THE MEDITERRANEAN AREA



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