

## PULVELAB

### CHAPTER A0: General information

ID.	Requisite	Data
A01	Contact person (name, email)	Xavier DELPUECH
A02	Farm name	PulvéLab
A03	Address and Country	Domaine Maspique Ancienne route de Ganges 34790 Grabels FRANCE
A04	Experience in farm demonstration activities (years)	2 years
A05	Land drainage if yes, water collectors	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
A06	Practicability of fields in case of rain	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no

### CHAPTER A1: Structure of the farm

ID.	Requisite	Data
A11	Kind of soil (knowledge on soil analysis and composition)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
A12	Soil slope	Approx 10 %
A13	Hedges and / or ecological infrastructures	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
A14	Stable grassland	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no

## CHAPTER A2: Focus on farm

ID.	Requisite	Data			
A21	Land without cultivation	Area (ha)			
	Total	0			
A22	Arable crops	Organic farming Area (ha)		Integrated crop management farm (ICM) Area (ha)	
	Durum Wheat	-		13	
	Total (ha)			13	
A23	Vegetable crops	Open field		Green house	
		Organic Area (ha)	ICM farm Area (ha)	Organic Area (ha)	ICM farm Area (ha)
	Total (ha)	0		0	
A24	Vine	Organic farming Area (ha)		ICM Farm Area (ha)	
	Total	7 ha		5 ha	
A25	Orchard	Organic farming Area (ha)		ICM Farm Area (ha)	
	Total (ha)	0		0	

A26	Livestock	Organic	Others (please specify)
	Total	0	0
A27	Other (specify)	Area (ha)	
	Total	0	

## CHAPTER A3: Description of farm equipment

ID.	Requisite	Data
A31	Machines for soil tillage	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
A32	Machines for weed control	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
A33	Irrigation system(s) Please specify:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
A34	Equipment with remote control Please specify:	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
A35	Livestock and pastures -Radio frequency ID -Automated milking, feeding, and monitoring systems	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
A36	Precision farming facilities	
	-Precision Application technologies (If yes specify)	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
	<i>Sprayer with PICORE monitoring system (recording of geolocalisation and spraying parameters)</i>	
	-Data acquisition technologies (If yes please specify):	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
	<i>LiDAR, NDVI, Physiocap sensors for vegetation characterization</i>	
	<i>Connected weather stations Sencrop</i>	
	-Data analysis & evaluation technologies (If yes specify):	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
A37	If the answer in A36 is "no", do you have availability of data and information from private / public database? Please specify:	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
	Maps of the vineyard (NDVI, EVI...)	

## CHAPTER A4: Description of facilities

ID.	Requisite	Data	
A41	Irrigation connections on field head	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
A42	Electricity in field availability	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
A43	Electrical generator availability	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
A44	Availability of tractors / machines equipped with GPS system	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
A45	Availability of machines for harvest. If yes specify for which crop(s):	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
A46	Availability of refrigerated cells for storage and conservation	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
A47	Availability of mechanical workshop: fixing ups, soldering, etc.	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
A48	Availability of a storehouse with latch for equipment...	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
A49	Possibility of connection for data transmission (3G, 4G, others) -	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
A50	Other devices, data, equipment availability Please specify:	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
	LoRa Network coverage		

## CHAPTER A5: Other conditions

ID.	Requisite	Data
A51	<b>Demo site profile:</b> - Implementation of a solution in living conditions simply with practical feedbacks - Experimentation and test of the solution with technical/scientific support and assessment feedbacks - Existence of a formalized service offer	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no  <input checked="" type="checkbox"/> yes <input type="checkbox"/> no  <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
A52	<b>Conditioned access to particular equipment (please specify)</b>  In case of special equipments requiring a certified experience, the final user/SME should demonstrate a specific training / license to use it in compliance with National/local laws	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
A53	<b>Availability of experienced staff to carry out and support field test trials</b>	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
	How many experimentation/demonstration activities are developed on average /year?	3-4
	How many qualified experts (technicians/researchers) are available?	6-7
In case of field management by third part:		
A54	<b>Possibility to lose part of the production based on reimbursement</b>	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
A55	<b>Possibility to apply experimental protocols supplied by third parts</b>	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
A56	<b>Possibility to host visitors during tests</b>	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
A57	<b>Possibility to sign confidentiality contracts</b>	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no

A58	<p>Presentation of the owner:          introduction of the site and presentation of the owner motivation. Specify if your facility is already devoted to digital innovation testing</p>
	<p>PulvéLab aims to accelerate innovation in precision viticulture by offering public and private partners a dedicated vineyard to test, evaluate and demonstrate the performance of innovative solutions in the specific topic of grapevine protection : smart sprayers, sensors and tools for modulation, traceability, and more broadly all the tools that can help winegrowers to reduce their use of pesticides and their impacts on the environment.</p> <p>The 10 ha vineyard is finely characterized, with several datasets : fields map, LiDAR vegetation indicators maps, NDVI maps by tele or proxi-detection, Physiocap® ... The PulvéLab is also equipped with sensors for the traceability of spraying and environmental parameters in order to evaluate innovative sprayers (prototypes from manufacturers) and to estimate the saving of pesticides in operational conditions. The expertise of the joint Research Unit team EcoTech (IFV &amp; IRSTEA, Montpellier) in spraying and grapevine protection completes this offer of skills.</p>