

AgroTec Center at Palestine Polytechnic University

(PPU)

The AgroTec center has been established as an integration and expansion of the existing laboratories at Biotechnology center, at the PPU, as part of the funded ERASMUS+ sponsored project (AgroTec NO. 101092160)

One of the primary roles of the Agrotech center at PPU, is to providing consultations and services for stakeholders and local community, training students and farmers, and to provide services for the Agri-food sector. The services provided by the center include:

- 1- Gathering information on local plants soil and climate change
- 2- Training on GIS and GPS applications in agriculture
- 3- Chemical analysis of agri-food products
- 4- Plant pests and diseases

The Agritech center encompasses several state of the art equipment which include the following:

- 1- Drone for agricultural application
- 2- Green house
- 3- Tissue culture lab
- 4- Kjeldahl device for Chemical analysis of agrifood products
- 5- Agrilive system which includes sensors for humidity, temperature, soil salinity and PH , that provide realtime data using data acquisition system
- 6- Chlorophyll meter for crop health
- 7- PCR device for disease diagnosis and genotyping

The AgroTec center at the PPU also encompasses the center of Chemical and Biological Analysis and Calibration (CCBAC). It was established to meet the growing need of the Palestinian community for high-quality testing services. The center aims to serve food, drug and cosmetics manufacturers or distributors and crop farmers and animal growers to meet the needs of regulatory bodies such as the Ministry of Health, the Ministry of Agriculture, and the Ministry of National Economy. The center has obtained the international standard certificate for testing and calibration laboratories ISO 17025:2017.

The establishment of CCBAC at Palestine Polytechnic University PPU, reflects its commitment to close interaction with PPU faculties and students, and highlights its academic and training role in conjunction with its primary mission of providing high-level analytical services, which are:

- Implementing chemical and biological tests for medicines, nutritional supplements, food, agricultural crops and cosmetics to ensure their compliance with global health and quality standards.
- Analysis of veterinary drugs.
- Analysis of pesticide residues in vegetables and fruits.

- **Implementing chemical and biological tests for pesticides.**
- **Calibration of basic devices in the field of chemical tests (providing calibration services for devices used in chemical tests to ensure the accuracy and stability of results).**
- **Encouraging the participation of researchers in internal and external tests and providing support to researchers from inside and outside the university, which enhances scientific exchange and cooperation.**
- **Providing training courses in the fields of chemical and biological analysis.**
- **Water analysis and testing to ensure the safety of water used in various sectors.**

The Agritech Center at the PPU collaborates and provide services to several stakeholders and farmers in the local agrifood industry. The network of the center included in the following list:

الرقم	الاسم	اسم الشركة	رقم غرفة التجارة	العنوان	البريد الإلكتروني	رقم الهاتف	رقم الفاكس	الموقع الإلكتروني	القطاع
1	ناصر الشرياتي	شركة شرياتي اخوان للتجارة والزراعة	Heb 82	الخليل -دوار الصحة	Sharbc02013@gmail.com	2226791/0599902555	2226792	www.sharco.com	استيراد وتسويق المواد الزراعية
2	رائد العويضات	مركز ابحاث الاراضي			Raed@licj.org	598501771	22290918	www.lrcj.org	ابحاث ودراسات ومشاريع وتنمية حقوق انسان NGOs
3	ارح ومسانل الاراضي المقدسة	مزارع ومسانل الاراضي المقدسة		الخليل-سنجر	muamedalrajab18@gmail.co	569848099			انتاج نباتي ووقاية
4	نضال سلطان	البدر للزراعة		الخليل- شارع الملك فيصل		599040439			الزراعة
5	بشار عبد الباري شاور	green lands		الخليل-قرن الثور					الزراعة الانتاج النباتي
6	سعدى القواسمى	مشاتل الوردة الحمراء	851210948	الخليل	gawasmehsaad@gmail.com	597777730	22250714		الزراعة الانتاج النباتي
7	بيان ياسر اقطيط	مزرعة بيان البيئية	859609224	رابود-دورا	bayanx3@gmail.com	598958001			الزراعة الانتاج النباتي
8	جمال يوسف حسين عمرو	البستان للمواد الزراعية		دورا وسط البلد					الزراعة الانتاج النباتي
9	عزام ناصر احمد	شركة اجروبال للمواد والخدمات الزراعية	7240	طمون- اريحا	info@agropal.net	599407555		www.AgroPal.net	استيراد وتسويق المواد الزراعية
10	أيمن نافذ الشرياتي	نبات فلسطين	590	دير البلح -الشارع العام-عمارة البركة	info@nabatpal.com	599443490		www.nabatpal.com	مواد زراعية
11	شركة السلام للتبريد	شركة السلام للتبريد	562545657	الخليل-فرش الهوا	Info@alsalamgroub.com	22228913	2220759	www.alsalamgroub.com	
12	داوود شكري عساف	شركة برو للادوية	562500835	كريسة/ دورا - الخليل	vetpro_032@yahoo.com	569591111	22287626		القطاع الحيواني
13	على رشاد رشيد جعينة	شركة ارشادي للمواد الزراعية		حلحول-الشارع الرئيسي	irshady.agri@gmail.com	569510770	22215369		القطاع الزراعي
14	نبيه الوحوش	نبيه للمواد الزراعية	952767663	حلحول-الشارع الرئيسي		599758202			القطاع الزراعي
15	وليد حمد طنينية	وليد حمد طنينية		ترقوميا	WaledTanina@yahoo.com	599303945			القطاع الزراعي
16	رامي مازن الشرياتي	شركة مجموعة الشرياتي		الخليل - شارع العدل	sharabatigrou@gmail.com	599999304			القطاع الزراعي
		شركة السلام		مركز ابحاث الاراضي		شركة اجروبال		شركة نبات فلسطين	شركة برو للادوية
									

The following are some photographs for the equipment available at the AgroTec Center at the PPU:



Figure (1): Digestion Unit. This system is used to analyze food and agrifood ingredients.



Figure (2): Kjeldahl unit used for food and agrifood ingredients.



Figure (3): Agri-live system for the monitoring of temperature, humidity, ph and other crop parameters



Figure (4): Agri-live system for the monitoring of temperature, humidity, ph and other crop parameters



Figure (5): Chlorophyll meter for the measurements of crop health.



Figure (6): Chlorophyll meter for the measurements of crop health.



Figure (7): Safety cabinet. A common lab for sterilized environment.

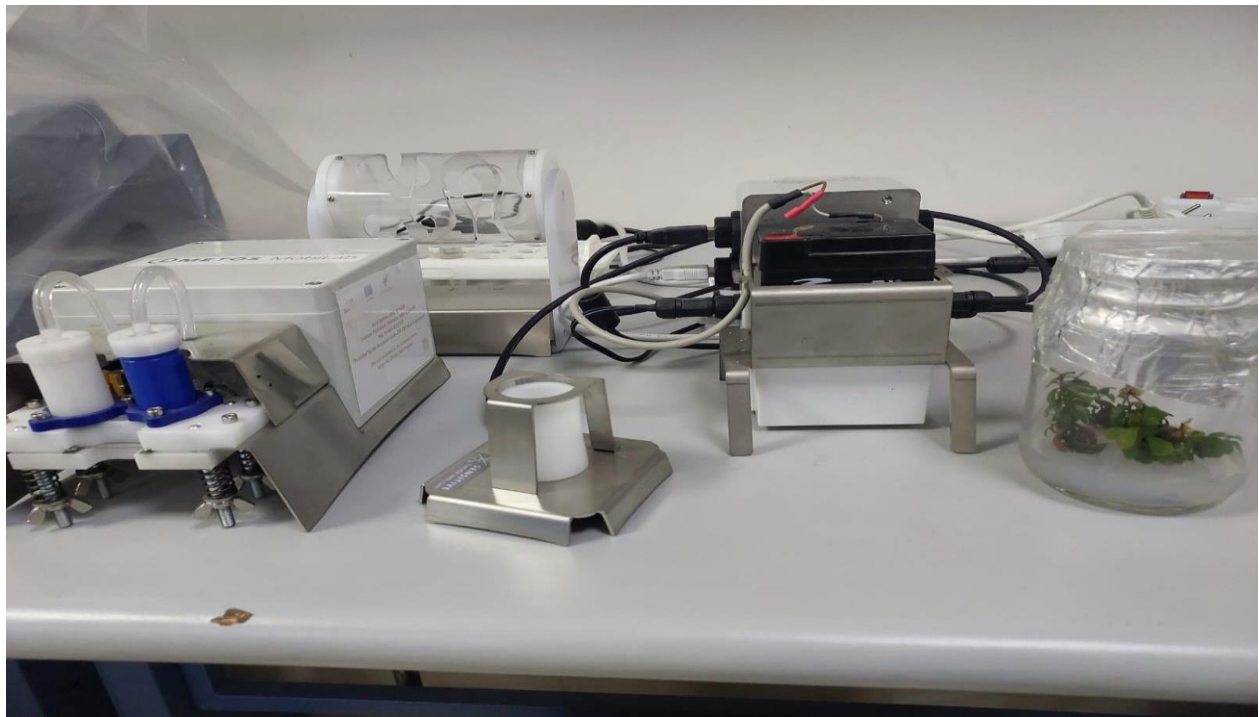


Figure (8): Mobile unit used to monitor soil parameters, including Ph and humidity.



Figure (9): Green House used for crop seedling preparations



Figure (10): Green House used for crop seedling preparations and student training



Figure (11): HPLC and ICP for agrifood chemical analysis



Figure (12): GC-MS for agrifood chemical analysis



Figure (13): HPLC for agrifood chemical analysis.