

# TOHUM | EXPANSE

MOBILE AGRICULTURE PLATFORMS



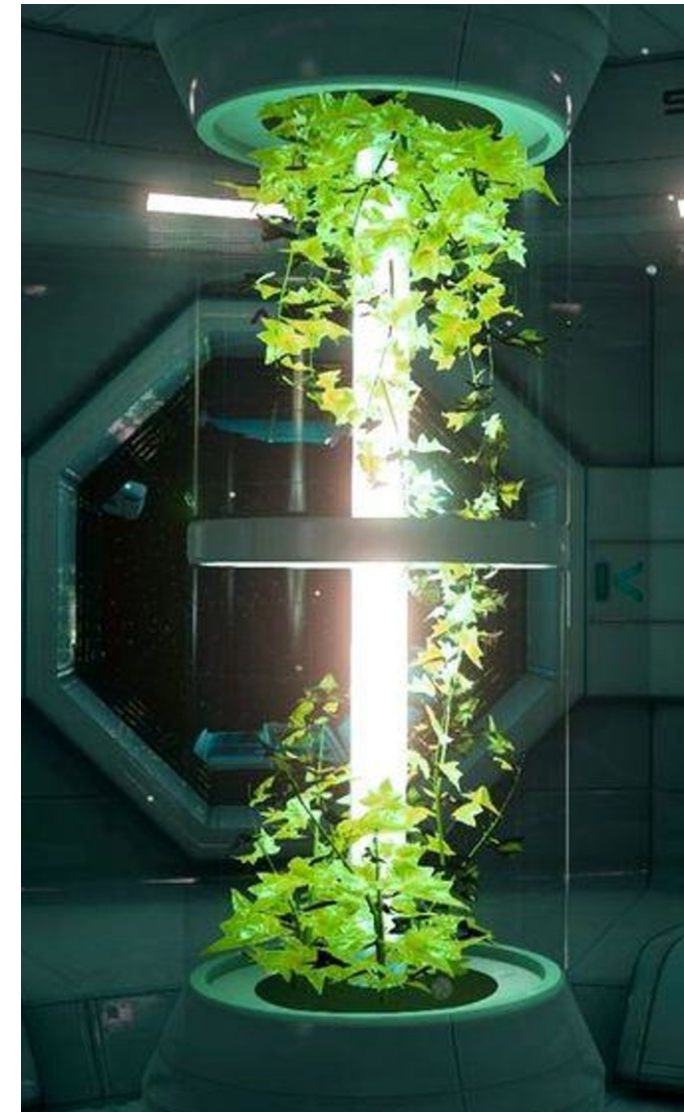
**EXPANSE**

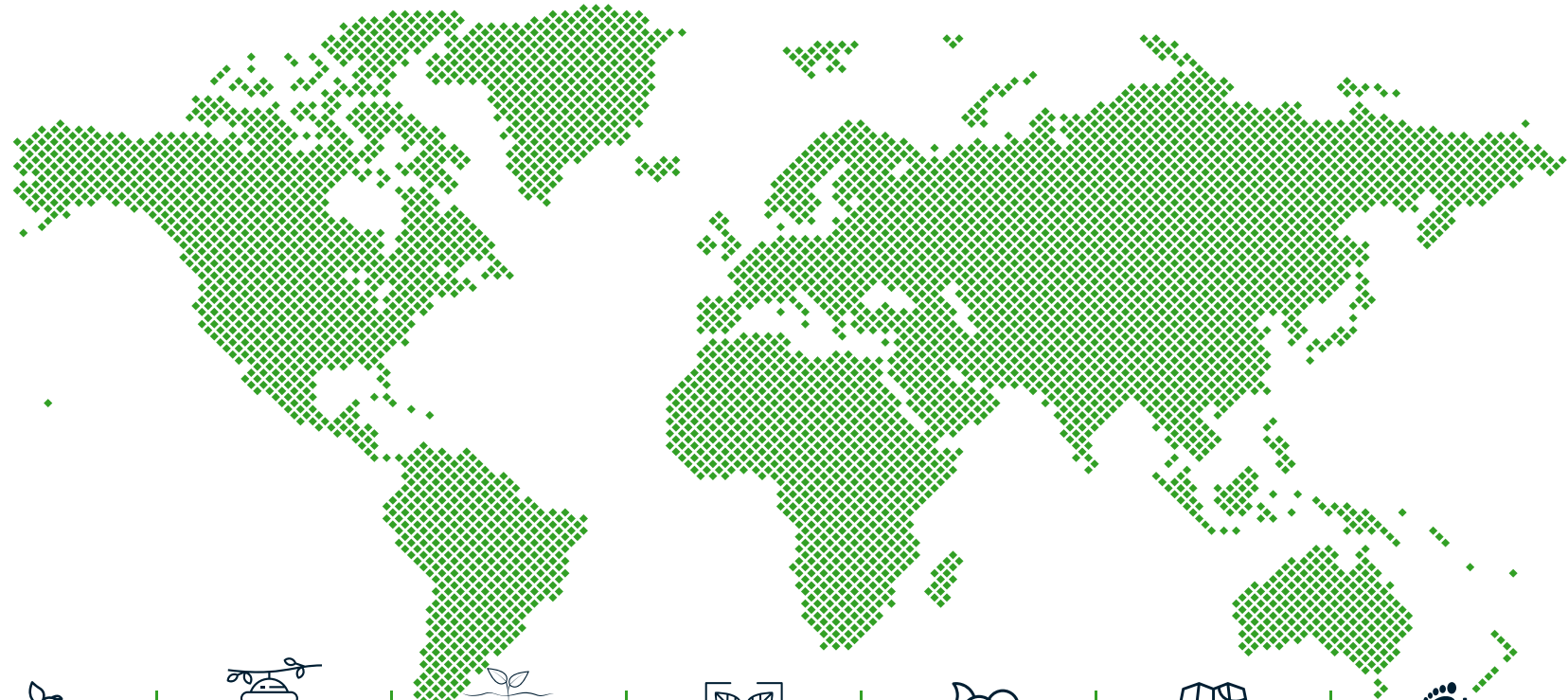
MOBILE AGRICULTURE PLATFORMS

TOHUM Defence Aerospace Strategy Development and Advanced Research Projects Inc., which reorganized its worldwide business network, fields of activity and organizational structure in 2019 in order to operate in emerging markets, has increased its targets by expanding the scope of its close collaborations with both global and regional producers that have proven themselves in the agriculture, animal husbandry, food and fast-moving consumer products industry in line with its corporate objectives. TOHUM, which has global experience to ensure that its stakeholders and participants under its main roof can continue to work under adverse conditions and a proven track record in providing support in any geography, has also turned to a series of mergers with individuals, groups and brands that are experts in their fields in order to ensure the protection of national producers' assets and personnel around the world, to minimize the inherent risks that exist in the perspective of brand and intellectual property rights, and to increase their ability to do business with confidence.

TOHUM Inc., which started its preliminary studies in 2015 in order to serve in the food and fast-moving consumer goods industry, has developed its capabilities, skills and operational flexibility to provide complete service, procurement, infrastructure and production solutions in any region of the world, in every segment of the biotechnology, agriculture, livestock and food sectors, in any region of the world, with the participation of agricultural and food engineers who are experts in their fields, who believe that their projects that go beyond the boundaries of traditional production can be realized in the near future, within its main structure in 2019.

The infrastructure and production solutions offered by TOHUM Inc. in the biotechnology, agriculture, livestock and food industries, both domestically and internationally, greatly relieve the burden of producers, enabling them to focus solely on their targets, while enabling them to pursue multiple projects simultaneously. The service and procurement phases of the projects it undertakes are finalized quickly and flawlessly without compromising on quality with its permanent and large expert staff, thus creating an opportunity for producers or customers to focus on different issues. TOHUM Inc., which guarantees consultancy from beginning to end in all the processes it is involved in, also provides additional services during the production stages by assigning sufficient capacity and number of personnel to the field when necessary.





SUSTAINABILITY



ECOLOGICAL  
EXPANDABILITY



ECOLOGICAL  
RESOURCE  
CONSERVATION



BIOSECURITY



ALL WEATHERS



ALL TYPES OF  
GEOGRAPHY



CO FOOTPRINT  
REDUCTION



OPTIMAL  
DESIGN



MODULAR  
DESIGN



SMART  
AUTOMATION



LOGISTICS  
FLEXIBILITY



MOBILE  
APPLICATIONS



REMOTE ACCESS  
AND MONITORING



AI INTEGRATION

## GENERAL TERMS



EXPANSE - Mobile Agriculture Platforms is an integrated indoor agriculture system that can produce fresh, healthy food and medicinal or aromatic plants in all climates and weather conditions, almost anywhere in the world, including the most challenging geographies. Specially designed with priorities such as optimum yield, wastage-free harvesting, biological safety, sustainability, logistical flexibility, physical structures, integrated smart automation and multi-purpose additional modules provide opportunities to create ecologically viable, independent habitats.

EXPANSE - Mobile Agriculture Platforms are entirely focused on plant health, biosecurity, minimizing the consumption of ecological resources and the return on investment (ROI & ROE) of producers. Our 'indoor food crop production technologies' offer unlimited possibilities for growing fresh, healthy, high-yielding food, which we have developed by matching tested real knowledge from studies and academic publications of space agencies, relevant departments of universities and the world's leading experts.

## DISTINCTIVE FEATURES

### OPTIMUM PLANT HEALTH



From air flows to climate controls, from customized LED lighting panels to smart automation systems, from hydroponic cycles to fertilization, it is designed to ensure the fast growth of food crops, medicinal and aromatic plants and to produce the highest level of healthy plants by guaranteeing only and only biosecurity to ensure perfect harvests.

### MAXIMUM YIELD



Adjustable flexible production areas make it possible for producers to grow and sell many times more healthy plants than they can harvest in traditional agricultural areas. Our Mobile Farming Platform modules are specially manufactured from insulated composite materials to ensure they can function in any geography, in any climate, in any weather conditions, from arctic cold to desert heat.

### ECOLOGICAL EXPANDABILITY



The structures are designed to include additional modules that can be interconnected and scaled up, supported by intelligent systems to allow producers to expand their business areas and make their production processes maximally efficient and sustainable, creating unlimited possibilities of ecological expandability.



### YEAR-ROUND CROP CULTIVATION

Mobile Agriculture Platforms protect crops from pests, diseases and unwanted external factors, enabling uninterrupted crop cultivation and efficient harvests. Thus, producers can sell the freshest and healthiest food, regardless of the seasons.

### OBTAINING AND SELLING HIGH QUALITY PRODUCTS

Food grown on Mobile Agriculture Platforms develops beautiful physical structures and strong flavors, achieving excellent taste because they have the customized optimum conditions that each plant needs.

### FOOD SAFETY AND TRANSPARENCY

By enabling food crops to be produced closer to target markets or end consumers, Mobile Agriculture Platforms simplify the supply chain and create transparency between producers and consumers, while reducing the risk of foodborne diseases.

### EASE OF USE

Mobile Agriculture Platforms make it easier for even individuals with limited agricultural knowledge to grow food crops, aromatic or decorative plants, as they eliminate many of the negative variables that affect traditional farming conditions and land-dependent farming.

### CREATING ADDED VALUE

Whether it is sustainability, business development, healthy food production, biosecurity or ecological gain, Mobile Agriculture Platforms offer opportunities to build business and expand market share using strong messages with strong foundations.

### EFFECTIVE AND REDUCED LABOR

Traditional agriculture does not require intensive physical labor-based actions such as plowing, weeding, fertilizing, spraying, extensive bending - standing - kneeling, heavy lifting and similar intensive physical labor. In Mobile Agriculture Platforms, the effective labor force needed to obtain a healthy harvest is regular cleaning and maintenance.



## BENEFITS

Mobile Agriculture Platforms offer a variety of benefits for all kinds of different crop producers on various levels, from efficient use of natural resources to fast turnover, from harvesting efficient and quality products in a short term to reduced labor force. Regardless of the type of plant grower, here are a few benefits that will cover the goals and insights of almost all producers.

### WATER CONSERVATION

Mobile Agriculture Platforms use ~90% less water than traditional soil-based farming methods by efficiently recovering the water used and reintroducing it back into the system.

### PLANT SAFETY

Food crops are generally vulnerable to extreme weather conditions, insects and pests. Crops grown in Mobile Agriculture Platforms are protected from harmful external factors.

### NO USE OF CHEMICALS

In Mobile Agriculture Platforms, toxic chemicals such as herbicides and pesticides do not need to be used as the food is grown away from harmful weeds, animals and insects.

### SMART SPACE UTILIZATION

Mobile Agriculture Platforms enable 3 to 10 times more crops to be obtained than crops grown on traditional agricultural lands with the same area size.

### PRECISION CONTROL

By using plant-specific formulas and technology-based daily monitoring, there is little risk of poor quality or quantity, as all the conditions they need to grow are provided.

### ECOLOGICAL EXPANDABILITY

Mobile Agriculture Platforms allows for ecological expandability with additional modules planned for development, such as modern beehives, organic fertilizer and biogas generators.

### RAPID RETURN ON INVESTMENT

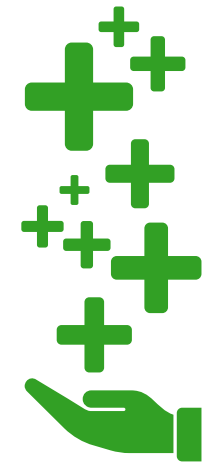
Mobile Agriculture Platforms have no seasonal restrictions or restoration periods. Immediately after harvesting a plant, a new one is planted to get the highest yield per square meter.

### FROM PRODUCTION TO TABLE

Mobile Agriculture Platforms deliver products directly to the end user without intermediaries, ensuring fresher, more nutritious food due to shorter distances.






### CO2 EMISSION REDUCTION

Reduces carbon emissions thanks to its compatibility with renewable energy sources and elimination of the need for fossil fuel consuming machinery and vehicles used in traditional agriculture.





## CROP CULTIVATION AREA / EFFICIENCY / SUSTAINABILITY

	 TRADITIONAL FIELD	 TRADITIONAL GREENHOUSE	 HYDROPONIC GREENHOUSE	 HYDROPONIC STOREY GREENHOUSE	 MOBILE AGRICULTURE PLATFORMS ( 32 M <sup>2</sup> AREA )
NUMBER OF PLANT ( QTY / 1000M <sup>2</sup> ) IN AREA( DECARE )	7000	8000	15600	25000	4257
NUMBER OF PLANT ( QTY / M <sup>2</sup> ) IN 1 M <sup>2</sup>	7	8	16	25	133
PRODUCTION PERIOD ( MONTH )	9	9	12	12	12
NUMBER OF HARVESTING IN 1 YEAR ( 12 MONTH )	8	8	9	9	12
EFFICIENCY= PRODUCT YIELD ( QTY / 1000 M <sup>2</sup> )	~7000	~8000	~15600	~25000	~4257
1 YEAR EFFICIENCY = PRODUCT YIELD( QTY / 1000 M <sup>2</sup> )	56000	64000	140400	225000	51084
1 YEAR EFFICIENCY IN 1 M <sup>2</sup> = PRODUCT YIELD ( QTY / M <sup>2</sup> )	56	64	140,4	225	1596

\* This projection shows the results obtained by simulating lettuce production in line with the data obtained from comparative assessments.

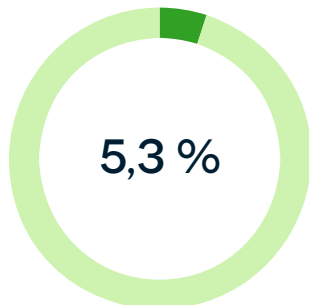
## CROP CULTIVATION AREA / EFFICIENCY/ SUSTAINABILITY

1000 M<sup>2</sup> AREA

32 M<sup>2</sup> AREA



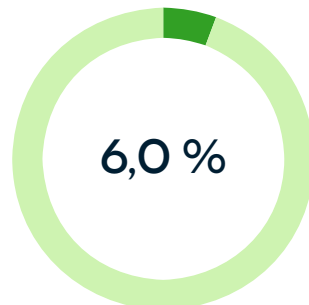
TRADITIONAL  
FIELD



7 QTY / M<sup>2</sup>



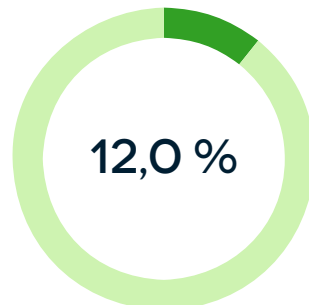
TRADITIONAL  
GREENHOUSE



8 QTY / M<sup>2</sup>



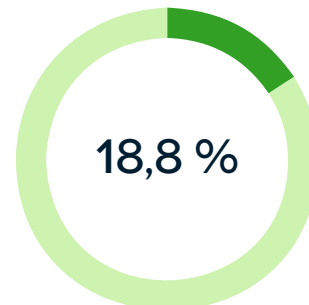
HYDROPONIC  
GREENHOUSE



16 QTY / M<sup>2</sup>



HYDROPONIC STOREY  
GREENHOUSE



25 QTY / M<sup>2</sup>

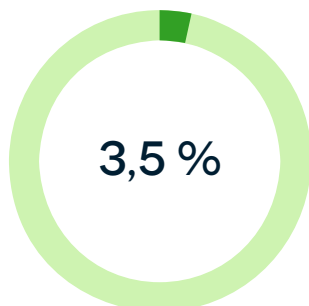


MOBILE AGRICULTURE  
PLATFORMS

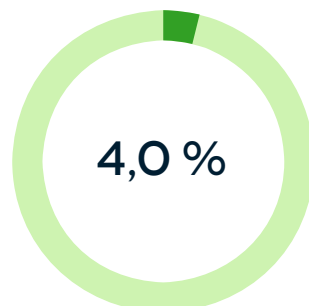


133 ADET / M<sup>2</sup>

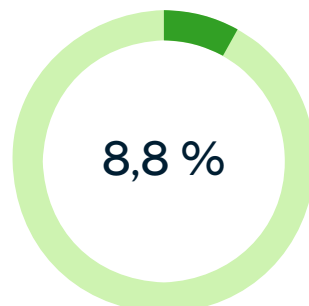
1 M<sup>2</sup>'DEKİ BİTKİ SAYISI ( ADET / M<sup>2</sup> )



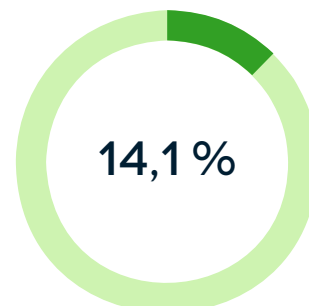
56 QTY / M<sup>2</sup>



64 QTY / M<sup>2</sup>



140 QTY / M<sup>2</sup>



225 QTY / M<sup>2</sup>



1596 QTY / M<sup>2</sup>

1 YEAR EFFICIENCY IN 1 M<sup>2</sup> =  
PRODUCT YIELD ( QTY / M<sup>2</sup> )

\* This projection shows the results obtained by simulating lettuce production in line with the data obtained from comparative assessments.



### 01 BASE MODULE (MTP - TM - V01)

The "Base Module" is a self-sufficient and high efficiency-oriented final "Mobile Agriculture Platform" structure that is isolated from adverse external factors and is insulated from all basic needs such as heating, cooling, ventilation, irrigation, fertilization, lighting, etc. in order to ensure sustainability in production.

In line with the structural engineering studies carried out to keep the grown crops healthy at the highest level and support their effective growth; the "Base Module" is designed to harvest the highest quality, most efficient crops.

In order to function practically anywhere in the world, even in the harshest weather conditions, the "Base Module" is equipped with a wide range of automation tools, production-management-control software, advanced air conditioning, as well as quality of life add-ons and customization/adaptation options.



#### INTELLIGENT FULL ENVIRONMENTAL CONTROL

MTP smart automation systems, remote surveillance and control applications, easy-to-use peripheral system interface and adaptive integrated artificial intelligence developments.



#### ENVIRONMENTAL CLEANLINESS

Does not contain harmful chemicals. Provides a safe environment against harmful animals, insects and unwanted weeds. Chemical pesticides, insecticides and weed inhibitors are not used.



#### CULTIVATION VOLUME

The MTP Base Module has 88 panels with 5 expandable MTP channels, each of which can grow 15 plants at full yield. One MTP Grow area has 440 MTP channels.



#### ILLUMINATION

Specially designed to nurture plants and stimulate the most efficient growth, the LED lights are placed at the optimal distance from the vegetation thanks to panels with flexibility of movement.



#### INSULATION

Mobile Agricultural Platforms are not affected by external weather conditions and climate changes, as they provide a controlled closed environment with a thickness of 100mm at 4.0 + R and insulation values of R22-R35.



#### ATMOSPHERE

Special HVAC design and moisture conversion devices can separate water trapped or evaporated in the environment created within the Mobile Agriculture Platform from the air and reintroduce it back into the system.



#### WATER

The MTP Base Module, which consumes between 18 Lt. and 40 Lt. of water per day, also reduces wastewater loss by separating the water trapped or evaporated in the created environment from the air and reintroducing it into the system.



#### DIMENSION

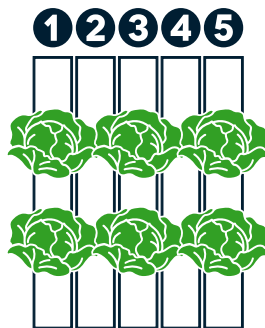
The Base Module, which is produced in ~2.5 m width and ~12 m length according to the purpose, has an ideal working environment that provides convenience for planting, crop inspections and crop harvesting thanks to its special interior design.

## CROP CULTIVATION CROP PLANTING PANELS

### CROP PLANTING PANELS

Mobile Agriculture Platforms include 88 MTP panels with 5 channels made of flexible antifungal polystyrene (HIPS) in accordance with food safety standards, each of which allows planting of more than 100 crops, with a total of more than 8800 crops harvested at a time.

Inside the MTP Panels, replaceable durable retucile foam is laid, which allows the plants to be fed as needed, saving a lot of water using gravity assisted drip irrigation.



#### SEQUENTIAL PLANTING

Channels Used : 1 - 3 - 5  
Crops Planted per Channel : 10 - 15  
Total Crop Planted : 2600 - 3900

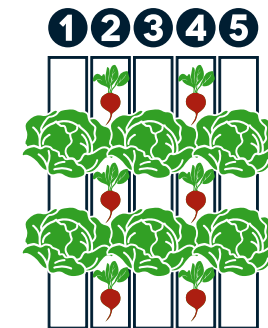
Recommended Products  
Large Crops :  
Lettuce, Cabbage, Japanese Mustard, Chard, etc.



#### LINEAR PLANTING

Channels Used : 1 - 2 - 3 - 4 - 5  
Crops Planted per Channel : 15 - 20  
Total Crop Planted : 6600 - 8800

Recommended Products  
Small Prunable Crops :  
Arugula, Watercress, Mustard Greens, etc.  
Herbs and Spices :  
Basil, Parsley, Coriander, Thyme, etc.



#### MIXED PLANTING

Channels Used : 1 - 2 - 3 - 4 - 5  
Crops Planted per Channel : Large Crops 10 - 15  
Small Crops 17 - 20  
Total Crop Planted : 6600 - 8800

Recommended Products  
Large Crops :  
Lettuce, Cabbage, Japanese Mustard, Chard, etc.  
Rooted Crops :  
Radishes, Turnips, Carrots, Beets, etc.

\* This projection shows the results obtained by simulating lettuce production in line with the data obtained from comparative assessments.

## CROP CULTIVATION SUSTAINABLE PRODUCTION PLANNING

### NURSERY STATION

"The 'nursery station' in the 'Base Module' is designed to feed 16 seedling trays with a minimum of 200 and a maximum of 288 seedlings, depending on the design used. This allows growers to germinate 4608 seeds at a time.

The sown seeds stay in the nursery station for about 21 days. During this time they grow in the 'nursery station', which is designed to provide them with enough nutrients and light to develop strong stems and healthy leaves. The sprouts are then transferred to the crop growing area.

### CONSTANTS

- 1 Crop Growing Area** = 88 Crop Planting Panels
- 1 Product Seeding Panel** = 5 Product Seeding Channels
- 1 Base Module** = ( 88 Crop Planting Panels x 5 Crop Planting Channels ) = 440 Crop Planting Channels in total
- 1 Nursery Station** = 16 seedling trays
- 1 Seedling tray** = 200 ~ 288 cells (tray of 288 cells is standard for the Basic Module, this number will be used in calculations)

- All seeds spend 3 weeks = 21 days in the nursery station.
- The time the crop spends in the Nursery Station is the number that will be used to determine how much you will harvest at a time from the Basic Module. For example, 4 weeks in the Nursery Station = 4 plant divisions.

### CROP PLANNING TO ACHIEVE CONSISTENT AND SUSTAINABLE HARVESTS

#### SCENARIO-BASED STRATEGY SIMULATIONS

**Harvest Products** : Crops harvested whole, including the root. Examples: lettuce, cabbage, etc. and all derivatives and root vegetables.

**Prunable Crops** : Crops whose maturing leaves are trimmed, leaving the root and immature leaves. Such crops have about four After pruning, the entire crop is harvested. Example: all varieties of leafy greens; chard, arugula, etc. and their derivatives.

\* This projection shows the results obtained by simulating lettuce production in line with the data obtained from comparative assessments.

## CROP CULTIVATION SUSTAINABLE PRODUCTION PLANNING

### SIMULATION 01: 4 WEEK = 28 DAYS LETTUCE

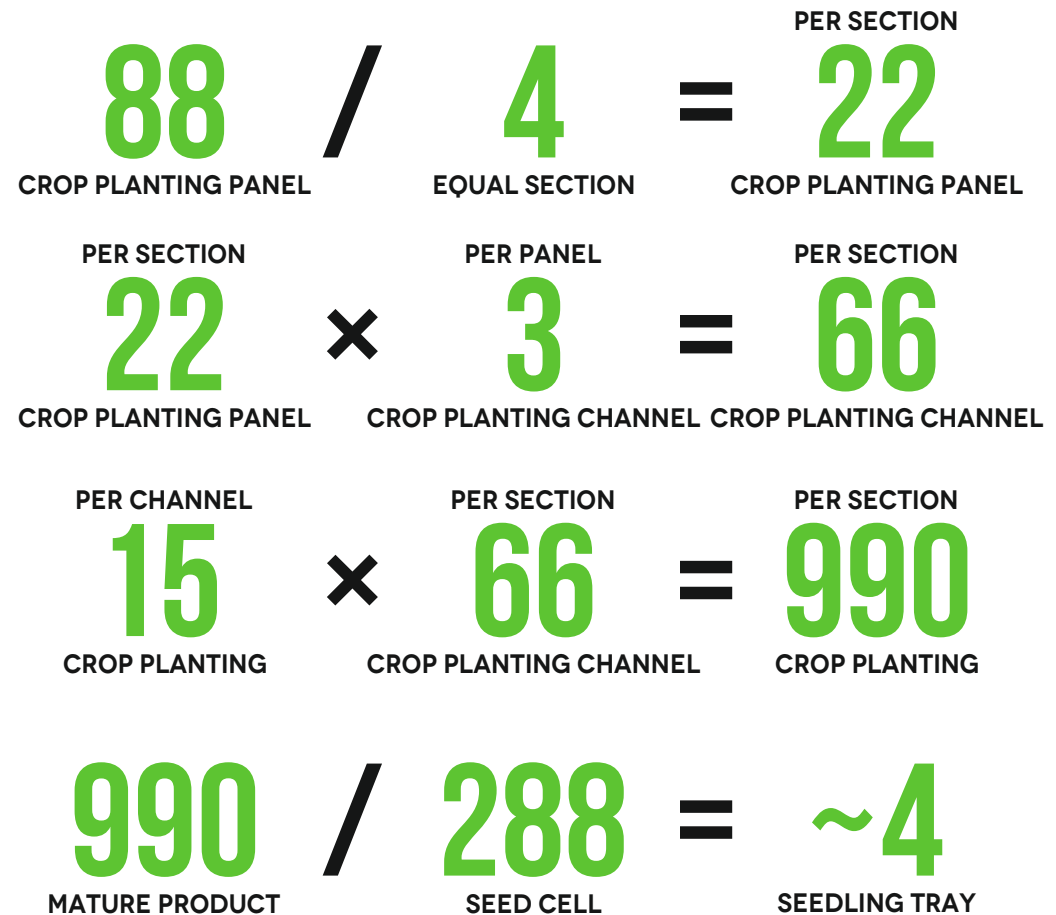
Once the desired time for lettuce to remain in the Crop Planting Panels inside the "Base Module" has been decided (4 weeks = 28 days in this simulation), the Nursery Station needs to be divided into equal denominators to ensure consistent and sustainable harvests each week.

By the time they reach four weeks of maturity, the lettuce heads are too large to fit in all five Cropping Channels when a row planting pattern is applied. In the row planting model used in this simulation, only three (1,3,5) Crop Sowing Channels in the Crop Planting Panels will be used.

Due to the planting interval standard set to achieve optimum yield on Modular Agricultural Platforms, the number of crops in the Crop Planting Channels used is 15 plants per channel.

Assuming an average success rate of 95%, approximately ~940 crops can be harvested each week in 1/4 of the Basic Module.

Once the final number of crops that can be harvested in a 4-week = 28-day Crop Growing Area cycle is determined, it can be calculated how many seeds need to be planted at the Nursery Station to reach the targeted harvest yield.



\* This projection shows the results obtained by simulating lettuce production in line with the data obtained from comparative assessments.

## CROP CULTIVATION SUSTAINABLE PRODUCTION PLANNING

### SIMULATION 01: 4 WEEK = 28 DAYS LETTUCE

To plant crops on 1/4 of the Mobile Farming Platforms Base Module and harvest ~990 crops per week on 1/4 of the area, it is necessary to sprout 4 seedling trays of seeds per week.

When starting production in the Mobile Agriculture Platforms Base Module, it will be necessary to wait 7 weeks = 49 days before the first full harvest.

[ 3 weeks = 21 days for the seeds planted in the Nursery Station to sprout + 4 weeks = 28 days for the sprouts transferred to the Crop Planting Area to mature]

After this period, crops can be harvested every week, provided that the program is adhered to.

- Producers who do not want to wait for this process can outsource their first sprouts and skip the 3 weeks = 21 days waiting period at the Nursery Station.

### WEEKLY PROJECTION | CYCLE MODEL

0. DAY	[ A ] 4 SEEDLING TRAY PLA		
7. DAY	[ B ] 4 SEEDLING TRAY PLANTING		
14. DAY	[ C ] 4 SEEDLING TRAY PLANTING		
21. DAY	[ D ] 4 SEEDLING TRAY PLA	[ A ] 22 CROP PLANTING PANEL TRANSFER	
28. DAY	[ A ] 4 SEEDLING TRAY PLA	[ B ] 22 CROP PLANTING PANEL TRANSFER	
35. DAY	[ B ] 4 SEEDLING TRAY PLA	[ C ] 22 CROP PLANTING PANEL TRANSFER	
42. DAY	[ C ] 4 SEEDLING TRAY PLA	[ D ] 22 CROP PLANTING PANEL TRANSFER	
49. DAY	[ D ] 4 SEEDLING TRAY PLA	[ A ] 22 CROP PLANTING PANEL TRANSFER	[ A ] 22 CROP PLANTING PANEL HARVEST
56. DAY	[ A ] 4 SEEDLING TRAY PLA	[ B ] 22 CROP PLANTING PANEL TRANSFER	[ B ] 22 CROP PLANTING PANEL HARVEST
63. DAY	[ B ] 4 SEEDLING TRAY PLA	[ C ] 22 CROP PLANTING PANEL TRANSFER	[ C ] 22 CROP PLANTING PANEL HARVEST
70. DAY	[ C ] 4 SEEDLING TRAY PLA	[ D ] 22 CROP PLANTING PANEL TRANSFER	[ D ] 22 CROP PLANTING PANEL HARVEST

\* This projection shows the results obtained by simulating lettuce production in line with the data obtained from comparative assessments.

## CROP CULTIVATION SUSTAINABLE PRODUCTION PLANNING

### SIMULATION 02: PRUNABLE CROPS - ARUGULA

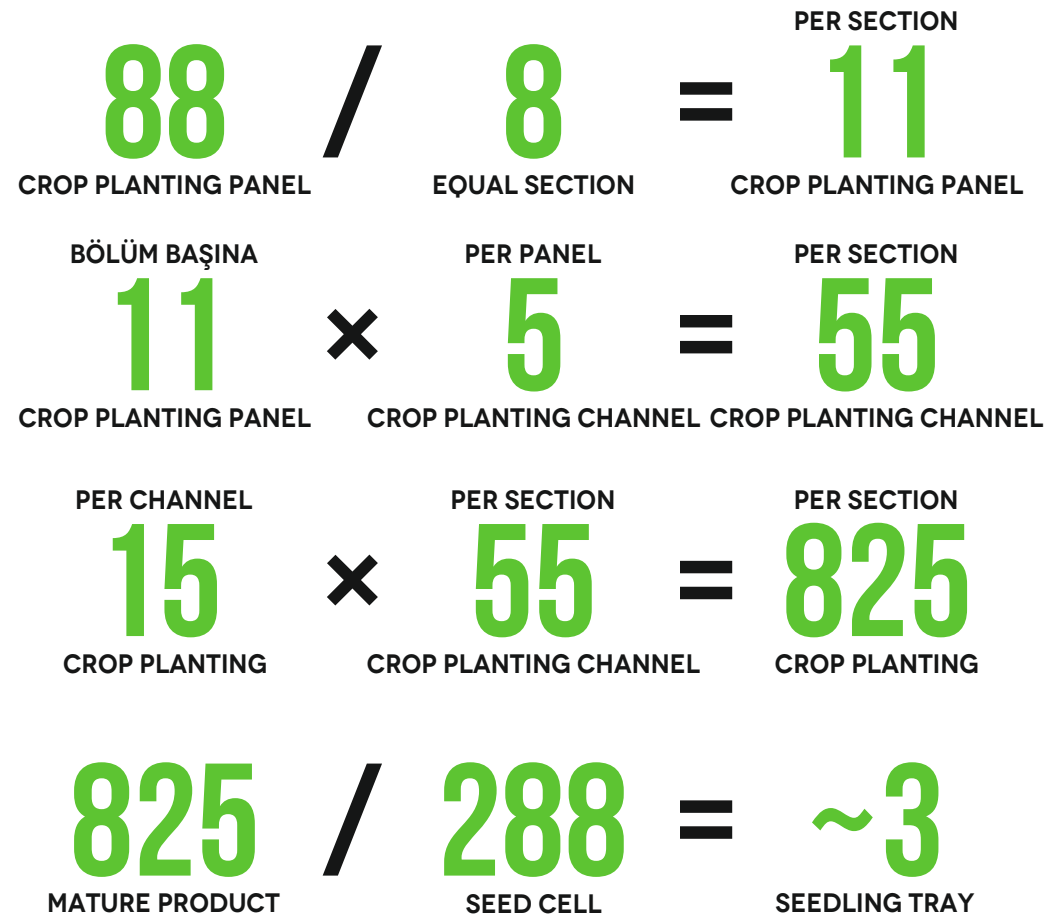
Arugula is one of the most preferred pruning crops because it is clipped for three weeks and then harvested. It spends 8 weeks in the "Base Module" (in this simulation 4 weeks reaching maturity, 3 weeks trimming, 1 week harvesting). Therefore, the Crop Planting Area must be divided into 8 equal denominators.

Since arugula is a small and compact plant, it can be planted in all the Cropping Channels in the Cropping Panels. In the sequential planting model used in this simulation, all five (1,2,3,4,5) Cropping Channels in the Cropping Panels will be used.

Due to the planting interval standard set to achieve optimum yield on Modular Agricultural Platforms, the number of crops in the Crop Planting Channels used is 15 plants per channel.

Assuming an average success rate of 95%, approximately ~785 crops can be planned to be trimmed each week in 1/8 of the Base Module.

When the number of crops to be pruned and harvested in the 8-week = 56-day Crop Growing Area cycle is determined, it can be calculated how many seeds need to be planted in the Nursery Station to reach the targeted yield.



\* This projection shows the results obtained by simulating lettuce production in line with the data obtained from comparative assessments.



## CROP CULTIVATION SUSTAINABLE PRODUCTION PLANNING

### SIMULATION 02: PRUNABLE CROPS – ARUGULA WEEKLY PROJECTION | CYCLE MODEL

To plant crops in 1/8 of the Mobile Farming Platforms Base Module and prune ~800 crops per week in 1/8 of the area, it is necessary to sprout 3 seedling trays of seeds per week.

When starting production in the Mobile Agriculture Platforms Base Module, it will be necessary to wait 10 weeks = 70 days before the first full harvest.

[3 weeks = 21 days for the seeds planted in the Nursery Station to sprout + 7 weeks for the sprouts transferred to the Crop Planting Area to mature, prune and harvest = 49 days]

After this period, cropping and then harvesting can be done for three weeks per cycle, provided the program is adhered to.

- Producers who do not want to wait for this process can outsource their first sprouts and skip the 3 weeks = 21 days waiting period at the Nursery Station.

0. GÜN	[ A ] 3 FİDE TEPSİSİ EKİM			
7. GÜN	[ B ] 3 FİDE TEPSİSİ EKİM			
14. GÜN	[ C ] 3 FİDE TEPSİSİ EKİM			
21. GÜN	[ D ] 3 FİDE TEPSİSİ EKİM	[ A ] 11 ÜRÜN EKİM PANELİ NAKİL		
28. GÜN	[ E ] 3 FİDE TEPSİSİ EKİM	[ B ] 11 ÜRÜN EKİM PANELİ NAKİL		
35. GÜN	[ F ] 3 FİDE TEPSİSİ EKİM	[ C ] 11 ÜRÜN EKİM PANELİ NAKİL		
42. GÜN	[ G ] 3 FİDE TEPSİSİ EKİM	[ D ] 11 ÜRÜN EKİM PANELİ NAKİL		
49. GÜN	[ H ] 3 FİDE TEPSİSİ EKİM	[ E ] 11 ÜRÜN EKİM PANELİ NAKİL	[ A ] 11 EKİM PANELİ KIRPMA	
56. GÜN	[ A ] 3 FİDE TEPSİSİ EKİM	[ F ] 11 ÜRÜN EKİM PANELİ NAKİL	[ A + B ] 22 EKİM PANELİ KIRPMA	
63. GÜN	[ B ] 3 FİDE TEPSİSİ EKİM	[ G ] 11 ÜRÜN EKİM PANELİ NAKİL	[ A + B + C ] 33 EKİM PANELİ KIRPMA	
70. GÜN	[ C ] 3 FİDE TEPSİSİ EKİM	[ H ] 11 ÜRÜN EKİM PANELİ NAKİL	[ B + C + D ] 33 EKİM PANELİ KIRPMA	[ A ] 11 ÜRÜN EKİM PANELİ HASAT
77. GÜN	[ D ] 3 FİDE TEPSİSİ EKİM	[ A ] 11 ÜRÜN EKİM PANELİ NAKİL	[ C + D + E ] 33 EKİM PANELİ KIRPMA	[ B ] 11 ÜRÜN EKİM PANELİ HASAT
84. GÜN	[ E ] 3 FİDE TEPSİSİ EKİM	[ B ] 11 ÜRÜN EKİM PANELİ NAKİL	[ D + E + F ] 33 EKİM PANELİ KIRPMA	[ C ] 11 ÜRÜN EKİM PANELİ HASAT

\* This projection shows the results obtained by simulating lettuce production in line with the data obtained from comparative assessments.

## CROP CULTIVATION CULTIVATED CROPS

### LETTUCE

WEEKLY HARVEST YIELD SCHEDULE			
PRODUCT TYPE	3 WEEK	4 WEEK	5 WEEK
YAĞLI BAŞ	1450 BAŞ	990 BAŞ	700 BAŞ
BAŞ	1450 BAŞ	990 BAŞ	700 BAŞ
KIVIRCIK	1450 BAŞ	990 BAŞ	700 BAŞ
YAPRAK	1450 BAŞ	990 BAŞ	700 BAŞ

#### CULTIVATED TYPES

Baş Marul  
Kıvırcık Yapraklı Marullar  
Düz Yapraklı Marullar  
Akdeniz Yeşillikleri

Romanie, Iceberg  
and similar sub-derivatives

### FIBROUS GREENS

WEEKLY YIELD	
PRODUCT TYPE	WEEK
ROKA	~ 31,8 KG
ASYA YEŞİL.	~ 56,7 KG
KALE	~ 45,4 KG

#### CULTIVATED TYPES

Roka  
Kale  
Asya yeşillikleri  
Spinach  
Tere  
Kuzukulağı

and similar plants and sub-derivatives whose leaves can be consumed.

### HERBS

WEEKLY YIELD	
PRODUCT TYPE	WEEK
BASIL	~ 40,8 KG
FRENK SOĞANI	~ 24,9 KG
DERE OTU	~ 40,8 KG
PARSLEY	~ 40,8 KG
THYME	~ 24,9 KG
ADAÇAYI	~ 34,2 KG

#### CULTIVATED TYPES

Basil  
Frenk soğanı  
Dereotu  
Maydanoz  
Kekik  
Adaçayı

similar herbs and spices and their sub-derivatives.

### ROTTED PLANTS

#### CULTIVATED TYPES

Beetroot  
Carrot  
Demet soğan (taze yeşil soğan)  
Radish  
Turnip  
Yer lahanası

similar plants whose roots and tubers are consumed and their subspecies.

### ORNAMENTAL PLANTS

#### CULTIVATED TYPES

Nergis çiçeği  
Latin çiçeği  
Civan Perçemi  
Çörek Otu çiçeği  
Horozibiği Püskül çiçeği  
Menekşe  
Kırlı Hanım çiçeği

similar flowering plants and their subspecies.

\* This projection shows the results obtained by simulating lettuce production in line with the data obtained from comparative assessments.

## PLANNED DEVELOPMENTS MODULES / DESIGNED MODULES



### 02 ACCESS MODULE (MTP - GM - V01)

They are also designed to act as a climate barrier and connect the modules to each other with insulation. The "Access Modules", which act as the main entrance, have integrated add-ons such as UVC + hygienic liquid shower stations and full body protective clothing cabins to provide disinfection and sterilization, and control and management panels that communicate with



### 03 CULTIVATION MODULE (MTP - YM - V01)

It is a capacity-enhancing module, either as an addition to the "Base Module" or independently, focused entirely on production, growing plants and harvesting high yields. Except for the 'Germinating station' and the size of the cultivation capacity, all functional features are identical to the "Base Module".



### 04 ENERGY MODULE (MTP - EM - V01)

Depending on the geography and climate conditions in which the "Mobile Agriculture Platforms" are deployed; these are modules that use renewable resources such as solar, wind, compost gas / biogas, and when necessary, they can be integrated with technologies such as fuelcell etc. and meet the energy needed independently. Energy controls in the structures they are included



In addition to the above modules, the realization of modern beehives that can be adapted to the cultivation areas and used in an integrated manner, and modules for different areas of use focused solely on the production of microgreens, spices and medicinal plants are in progress.



### 05 AQUA MODULE (MTP - H2OM - V01)

Depending on the geography and climatic conditions where the "Mobile Agricultural Platforms" are deployed; it is the module that will meet the water needs of the sprouting and cultivation modules by using techniques such as purification, aerial water collection, drawing from wells in areas where there is no clean water source or far from water. The irrigation control in buildings



### 06 NURSERY MODULE (MTP - FM - V01)

Customized module for seed production, development, sprouting and crossing. All functional features are similar to the 'Germination station' in the "Base Module" with the exception of the cultivation area. It has integrated additional software and automation systems focused on its customization.



### 07 SILO MODULE (MTP - SM - V01)

A module equipped with the necessary air conditioning and refrigeration systems for the storage and freshness preservation of seeds, ready-to-use germinated or sprouted plants or cultivated products until they are placed on the market. In addition to the basic features of the systems they are included in, automation systems can also be adapted with additional software

## PLANNED DEVELOPMENTS PRODUCER SUPPORT PRODUCTS





TOHUM | EXPANSE

SUSTAINABLE OUTPUTS  
END-USER ORIENTED PRODUCTS





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