



# Jacob's well farm

Jacob's well farm project is the first I.C.O. self-sufficient in the world that does not dwell on a normal farm but goes beyond creating a real autonomous production system capable of providing the best that nature offers us with the most sophisticated applied technologies.



The project was born from the need to search for something new, which did not fall within the standard canons of wholesale social production where work is increasingly voluminous, prices are always lower but which is based on a decentralized alternative market by supplying not only products. fresh and processed but also a new innovative and managerial reality that will revolutionize the agricultural organization.

## The reason of agriculture

Today the industrial agricultural sector is a sector in continuous growth that develops more and more precision management technologies with very high efficiency, providing the farmer with more yields, less effort and greater control of the quality of his products. However, today these new systems are not within the reach of the vast majority of farmers who are forced to use old energy-efficient and uncompetitive production systems on the market; allocating this industrial sector to an inexorable decline. Jacob's well farm project aims to solve this problem by creating a self-sufficient agricultural system where energy conservation, permacultural management and the use of new terminal installations make the project not only competitive but also economically independent. Starting right from the first industrial sector applied in the territory, that is agriculture.



# *short story of the Italian agriculture*

Agriculture in Italy has very ancient origins that can still be found in prehistoric times (bronze casting) where the populations cultivated and bred minimally and lived mainly from hunting and fishing, living in places called stilt houses whose purpose was mainly to preserve and protection. Over time, the populations began to evolve in the civil field thus creating not only new increasingly productive agricultural machinery but also to manage energy resources in an increasingly efficient way, to make everything more immediate and valid thus avoiding possible internal famines that would compromise the internal economy. This highly auspicious historical period in the West is identified as the era of the Roman Empire. At the fall of the same decade, the agricultural working culture inherited in it also began, beginning a real mysterious and dark period. But nevertheless in this darkness and mysteriousness we also find a lot of activity; made of struggles, important social conquests and considerable commercial clashes that see the entire West and the Italian peninsula revolutionary protagonist of this era also in the agricultural sector. This lasted from the municipal period until the period of the unification of Italy in 1861. It was here then that towards the end of the nineteenth and early twentieth century that Italian agriculture passed to its own industrialization (the advent of steam engines) with new mechanical cultivation plants and new environmental management structures (derived from reclamation) that allowed Italy to upset the entire agricultural paradigm by redefining a new visionary line that did not exist until a century before; this revolution lasted until 1946 when Italy turned to the republican vision. From the 1950s until 1990 with the new industrial progress, the advent of agricultural machinery (tractors) in agriculture, the new irrigation systems, the applied phytosanitary / fertilizer chemistry and the research on mechanizable agricultural cultures completely eliminated the danger of famine within the country, bringing the peasant families to their own farms and family farms with new branded and Identified products. Finally transforming the whole nation into a true industrial economic power with a real agricultural lobby in Europe, and having a leading sector and excellence all over the world.



# The Token

A coin, a code, a goal to accomplish.

## The Tickvah

The Tickvah will be the cryptocurrency connected to our I.C.O. whose purpose will be to connect the decentralized Ethereum platform (blockchain / exchain) to the real economy while at the same time forming a representative power to the currency; useful to perform its main task, that is to give a value agreed by convention. Subsequently it will model its nominal value within the platform to remain constant and strong over time. Here we begin with the primary objective of the Tickvah, namely to be used as a measuring instrument for those tied to our production of goods and services.



This as explained above will produce smart contracts connected and modulated to business management and for current and future project plans,



The tickvah is to be understood as a spontaneous offer linked to a productive and innovative project in an industrial sector as old as the world that, as never before, needs to be financed and supported in this moment to give a future to the agricultural enterprises of the third millennium.

*"my multinational is always been agriculture"*

*"Luca Zaia"*

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# golden berry greenhouse yard

Illustrative manual of the physalis alkekengi greenhouse cultivation project



# golden berry greenhouse construction site

What is the golden berry ? Golden berry is an exotic plant of South American origin with different strains throughout Europe and the world, where it is particularly recognized by its fruit called lantern because of the shape it resembles. Having already particular experience in the aforementioned cultivation, we were able to ascertain the strengths and weaknesses by summarizing them below: "The strengths of the fruit are, the excellent phytosanitary management (as it does not need phytosanitary products), the good productivity, the excellent defense characteristics soil erosion and good market prospects. The defects, however, the annual management of the plant (due to its wild nature), the humidity of the freshly picked fruit (due to the formation of mold in the fruit, negatively affecting the conservation of the fruit) and the early frosts (one of the largest rocks to be addressed as they block the plant in full winter harvest) ". Today we want to participate to solve these defects and make the cultivation excellent in its productive period, that's why the Alkekengi greenhouse project was born



## description of the project

The golden berry greenhouse construction site will extend over approximately 2.5 hectares of land on which we will build 23 10x90m multi-span greenhouses with lateral and upper opening systems for the spans and with sprinkler irrigation systems and rainwater collection, through tanks placed in correspondence with the agricultural shed; to ensure the correct efficiency of ventilation, watering, and rainwater collection. All managed and monitored electronically.



Multi-span greenhouses

The golden berry greenhouses construction site will extend over approximately 2.5 hectares of land on which we will build 23 10x90m multi-span greenhouses with lateral and upper opening systems for the spans and with sprinkler irrigation systems and rainwater collection, through tanks placed in correspondence with the agricultural shed; to ensure the correct efficiency of ventilation, watering, and rainwater collection. All managed and monitored electronically.

The greenhouses will also have an access channel from the transformation shed connected to a biomass boiler that will be used to heat the greenhouses during winter periods, thus maintaining a continuation of the harvest until February



**1**

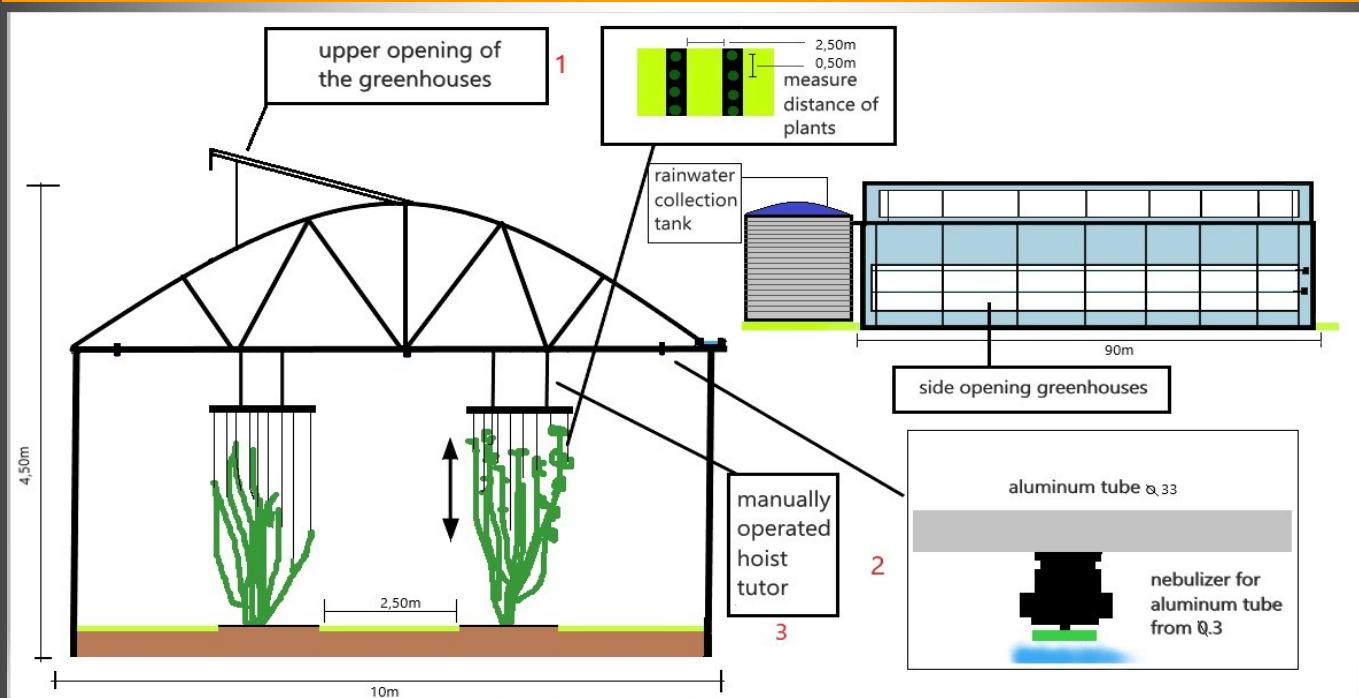


**2**

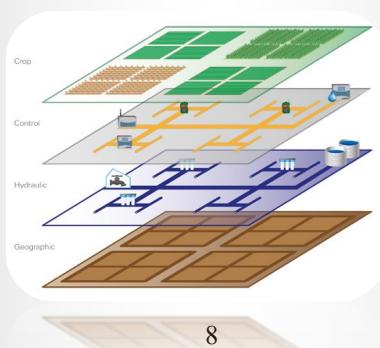


**3**

The greenhouses will also be equipped with a manually operated hoist guardian that will keep the plants in tension as they grow, thus facilitating the positions during the harvest period (drawing 3). Drawing 1 represents the distances between the plants on the row and on the inter-row that will be maintained during the transplanting of the same .. Drawing 2 instead represents the diameter of the irrigation pipe and the nozzle for irrigation nebulization.



For the monitoring of the protected culture in the greenhouse, the Netafim Umanage system "<https://www.youtube.com/watch?v=umQh1kklbZY>" will allow us to better control the plant in all its growth stages and then download any data in the central computer thus providing in real time all data of the plant and its daily needs.

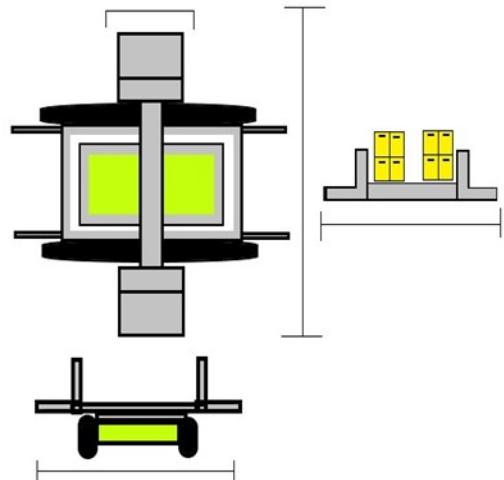


The cultivation will consist of about 8500 plants distributed in 2 rows in each span, each plant will be arranged at a length on the row at 50 cm from plant to plant and arranged at 2.50m on the inter-row ensuring the peaceful passage of agricultural vehicles. In the inter-row there will also be a turf that will be mown regularly.

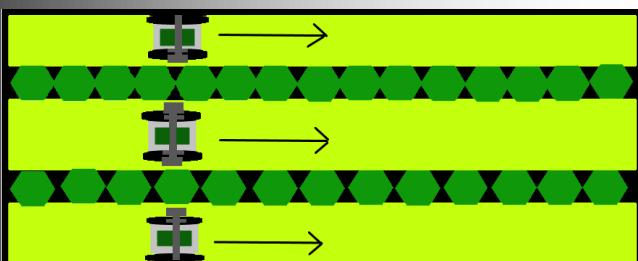


"Note well that the motivation of the greenhouse turf is mainly due to 3 essential reasons.

the first for the filtering of irrigation water that once percolated in the aquifer will allow its purification, the second for cushioning because it will allow the reduction of the trampling of agricultural machines during seasonal processing and the last for synergy because it will guarantee the biodiversified synergy of the species of insects inside the greenhouse thus creating a novice ecosystem also inside it."



.This new artisan hooking platform for bins transport robot Samatec rauper, will facilitate the manual collection of alkekengi. In addition, combined with a parallel harvesting technique on both sides of the cultivation, it will allow you to harvest the product in an excellent way, saving time and energy, thanks also to the low-consumption electric motor of which it is available.



The figure on the left explains the parallel harvesting technique on both sides with 3 Samatec rauper bins transport robots.

# Processing

Below we list the scheme that outlines the processes that will be carried out all year inside the greenhouses

April

Soil hoeing and mulching

May

transplanting golden berry seeding

irrigation

July

binding of plants and  
arrangement of plants in the  
manual lifting hoist

mowing

August

start of harvest, mowing  
grass and watering plants

February

at the end of the month, end of harvest,  
greenhouses opening and plants renewal

April

shredding plants and re-growing  
after June with possible replacement  
of dead plants

We remind you that during the winter the greenhouses will be heated by means of a biomass boiler (figure 1) located outside the construction site which will allow a rise in the temperature inside it not exceeding 10 ° C, in addition to avoid problems related to the daytime light of the plants we will use led lamps (figure 2) which will illuminate the cultivation in the aforementioned period thus guaranteeing the normal cycle of maturation of the plants in the fruits



1



2

# Equipment

Below we list the equipment that will be used within the aforementioned construction site

- greenhouses (more accessories)
- rainwater collection tanks
- 1- mulcher transplanter
- 2- tying tool
- 3- Gaspardo male hoe 2,50m
- 4- rauper Samatec x3
- 5- Netafim Umanage with program for



## Fresh and turned products

Once the fruit is harvested and screened, the larger lanterns will be used for the sale of the fresh product and the smaller ones preserved and transformed into jams and mustards.



A curiosity, the beneficial effects of the fruit are the richness of carotene, the presence of Vitamins A and C, the presence of antioxidants, the great diuretic power of the fruit and the considerable intensity of tannins.



# breeding yard

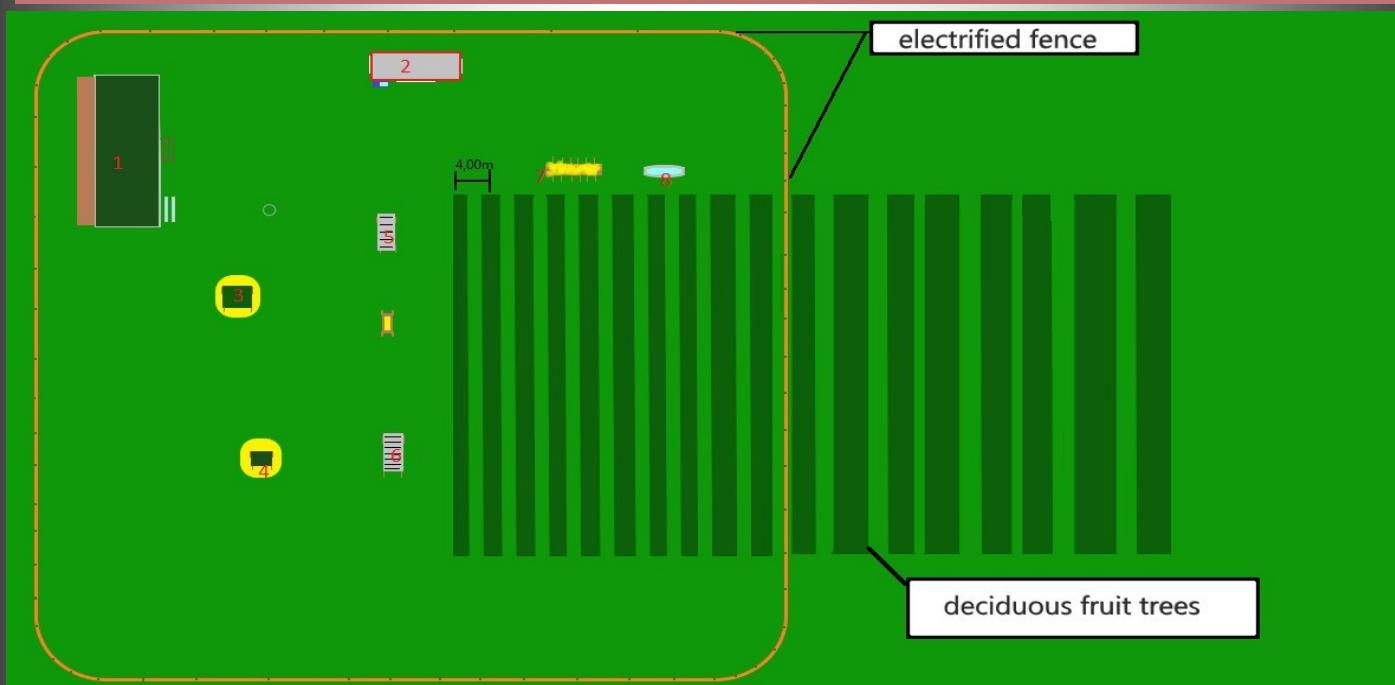
Illustrative manual of the breeding site project

In a self-sufficient farm the presence of a yard used for breeding cattle becomes indispensable, not only to ensure a good supply of organic matter to the soil, but also to amplify the range of products on which the farm will increasingly go away to supply

As an idea, born mainly from strong permacultural influences, a grazing cattle breeding yard is our primary intention, however even if a certain practice appears organic and sustainable it still has significant problems such as: "the development of a monoculture (presence of only one species in a specific territory), the availability of water in the summer, the presence of shelters for protection from bad weather, the presence of shadow areas in the pasture area, the control of each individual to manage and monitor the production and diseases in a preventive way and the problem of desertification of the grazing area if intensively used. The How to do this in a completely eco-sustainable way is our priority, for this reason the breeding yard project was born.

## *Description of the project*

The project we propose is a typical grazing of sheep and poultry in interspecific interaction between species, on a land of about 4 ha. Of which 2 hectares will be used for simple breeding, and the remaining 2 hectares will be used for the supply of fodder in the winter period. All this obviously based on a replacement interval of at most 3 years to avoid serious problems of soil desertification.



"The figure shows the project where at the top on the left side you can see the shelters for chickens and sheep figure 1 and figure 2, then scrolling down we find the sand pools with canopies figure 3 and figure 4 and the two mangers and water troughs exteriors with canopy figure 5 and figure 6. On the right side in front of the orchard we see the rack figure 7 and the bath tub drinker figure 8 for the sheep."



**1**



**2**

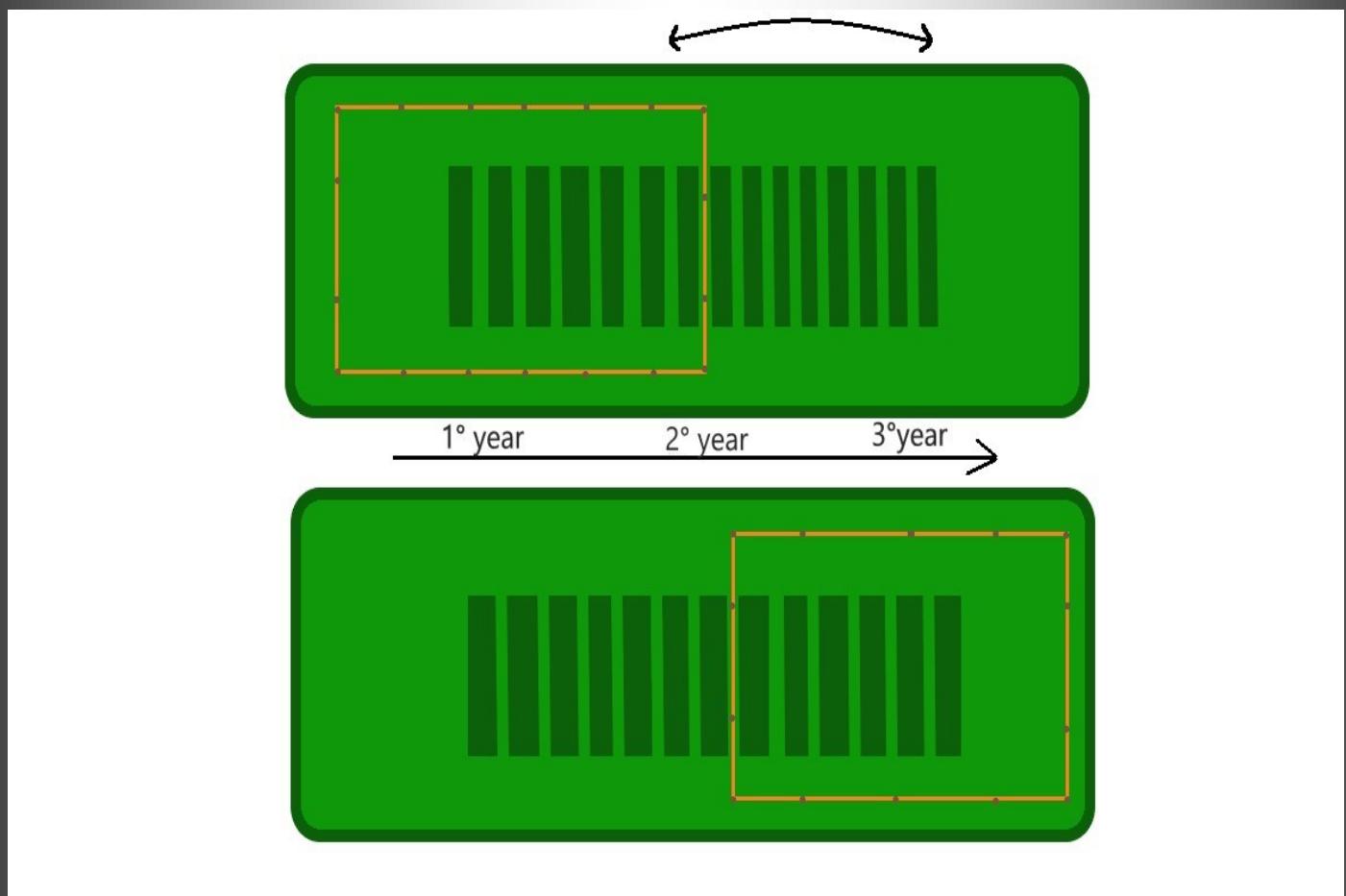


**3**



**4**

"Siphon drinker for chickens figure 1, sheep feeder figure 2, chicken feeder figure 3 and sheep drinker figure 4"



"The figure above shows the conversion of the ground from the left to the right side at the end of the third year"



sand pit with shed for the sand bath of chickens which helps them to get rid of lice and external parasites



"Internal drin-ker of the sheepfold"

The land for breeding will be mainly cultivated as a pasture and completely fenced at its perimeter with an electrified fence of a height of approximately 1.20-1.30 m, with solar-powered battery energiser. Furthermore, in the central part of the deciduous fruit trees in the wild (e.g. pear or apple tree) will be added to the ground at an inter-row distance of about 4 - 5m, to guarantee the animals shade and fruit during the summer and control of the animal parasites during winter. In addition to this, in the external part of the fence the excellent inter-row distance between fruit trees will facilitate the passage of agricultural vehicles in the mowing and packaging phase of pasture hay, then using the aforementioned for winter feeding of livestock. In addition, essential equipment will also be added to the ground, such as sand pits with canopies (for the sand bath of chickens), feeders, external siphon drinkers with canopies (also for chickens), a rack and a tank for sheep modern manufacture

## *Livestock shelters*

Each type of shelter is specific from species to species therefore we will describe below the shelters that we have thought of using for our pasture breeding, however I would like to remind you that each selected cattle shelter has been designed on a mobile basis, to be able to move it to the side of the land that will be used at the end of the third year.

### *Poultry shelter*

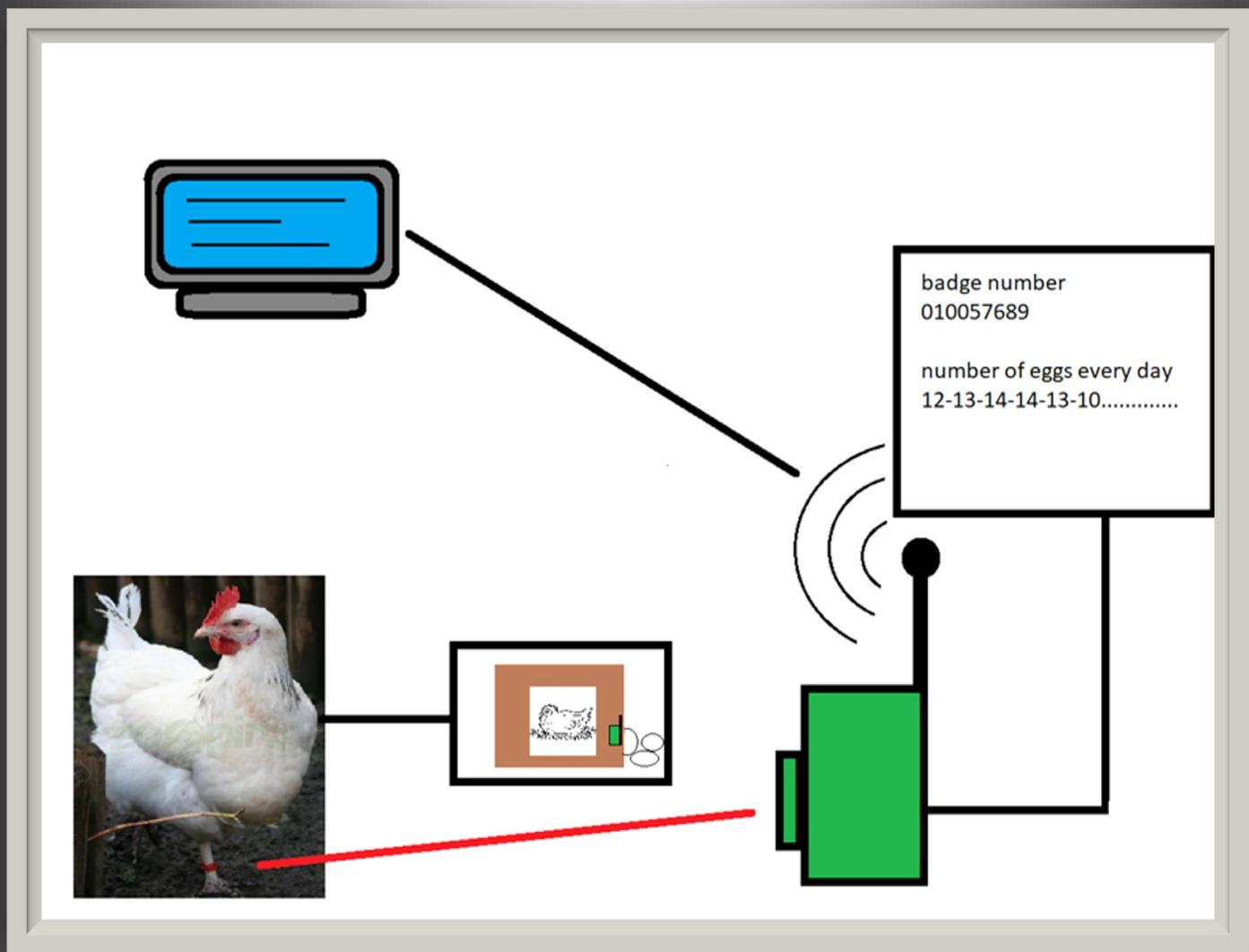
The shelter for organic poultry farms type SKA is ideal for our breeding, in fact it will allow us to accommodate all the 500 maximum heads that we want to breed. With this, we specify that our intention is not to buy the 500 items immediately, but to buy at least a third of them (about 166 chickens) to achieve the pre-established goal, in 3 production years following a natural internal recovery cycle.

- covered area m. 9.2x15
- eave height m. 2:56
- 25% roof slope
- ridge height m. 3.72
- Raisable and draggable by 8 wheels in different position
- 4 side exit doors for chickens, in outdoor gardens
- Centralized egg collection system outside the shelter in a covered area
- Presence of the latest generation of collective nests compliant with animal respect standards
- Complete with drinking troughs, feeding troughs and resting perches
- Capacity according to organic breeding standards: 720 laying hens or 1380 broilers.



# new ideas

A small innovation that we have decided to include in our breeding is the addition of breech brands with personal code and electronic tags inside the collective nests, which will allow, once the hen starts to lay, to recognize the head and to monitor the daily production of eggs, then sending each data to the central computer which will process the data at the end of the laying cycle of the hen, ensuring an identification of the most productive animals, which will then be kept inside the farm for another year. The rest of the garments will then be destined for the canteen thanks to the good gastronomic characteristics that they have matured over time.



*The figure above illustrates the functioning of the electronic tag system useful for identifying the most and least productive garments.*

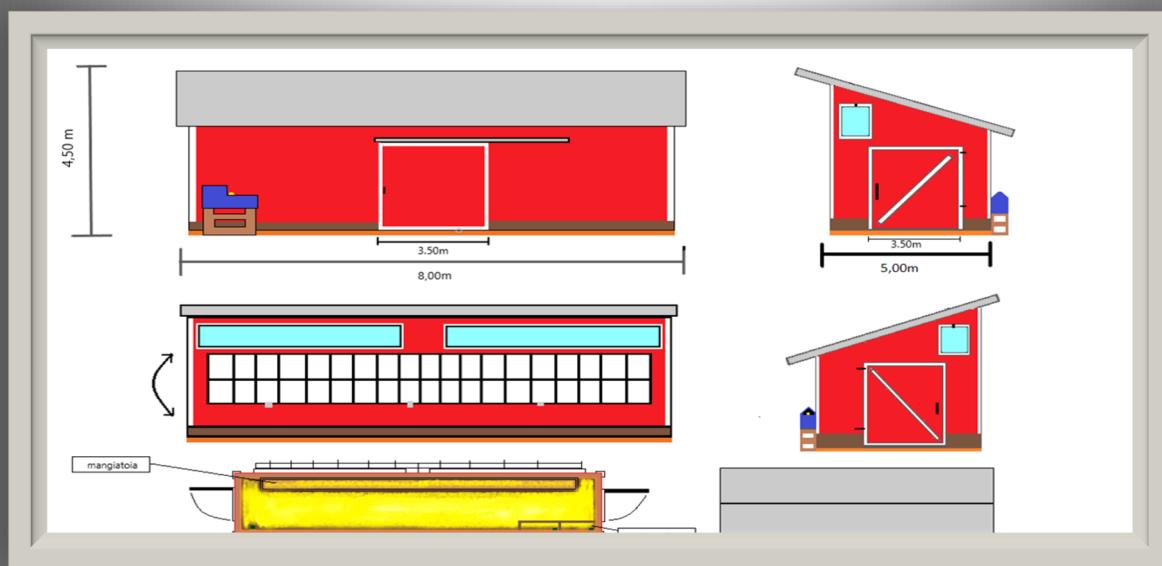
## *Sheep shelter*

Unlike the previous shelter, this is smaller in size and is based on a modern construction, with a basement of partially buried brick curb and with fir wood walls having windows on the east, west and north sides. The prefabricated structure will then allow the home to be dismantled, moved and reassembled within the new land, at the end of the third year.

It is designed to house about 15 sheep and is equipped with 4 drinking troughs, one outside, one inside and 2 in the farrowing room. The length of the shelter is 8 m while its width approximately 5m. These measures will then allow you to operate inside also with agricultural vehicles in winter cleaning operations, which will be carried out several times a year to keep the sheepfold always hygienically clean.

## *Features*

- Length 8 m.
- Width 5 m.
- Height 4.50 m.
- 2 delivery rooms
- 3 internal drinkers
- 1 external drinking trough
- Feeder with anti-exit front grid for straw
- 2 side doors for operators
- 1 rear door for access to grazing animals
- 2 side windows
- 2 front windows

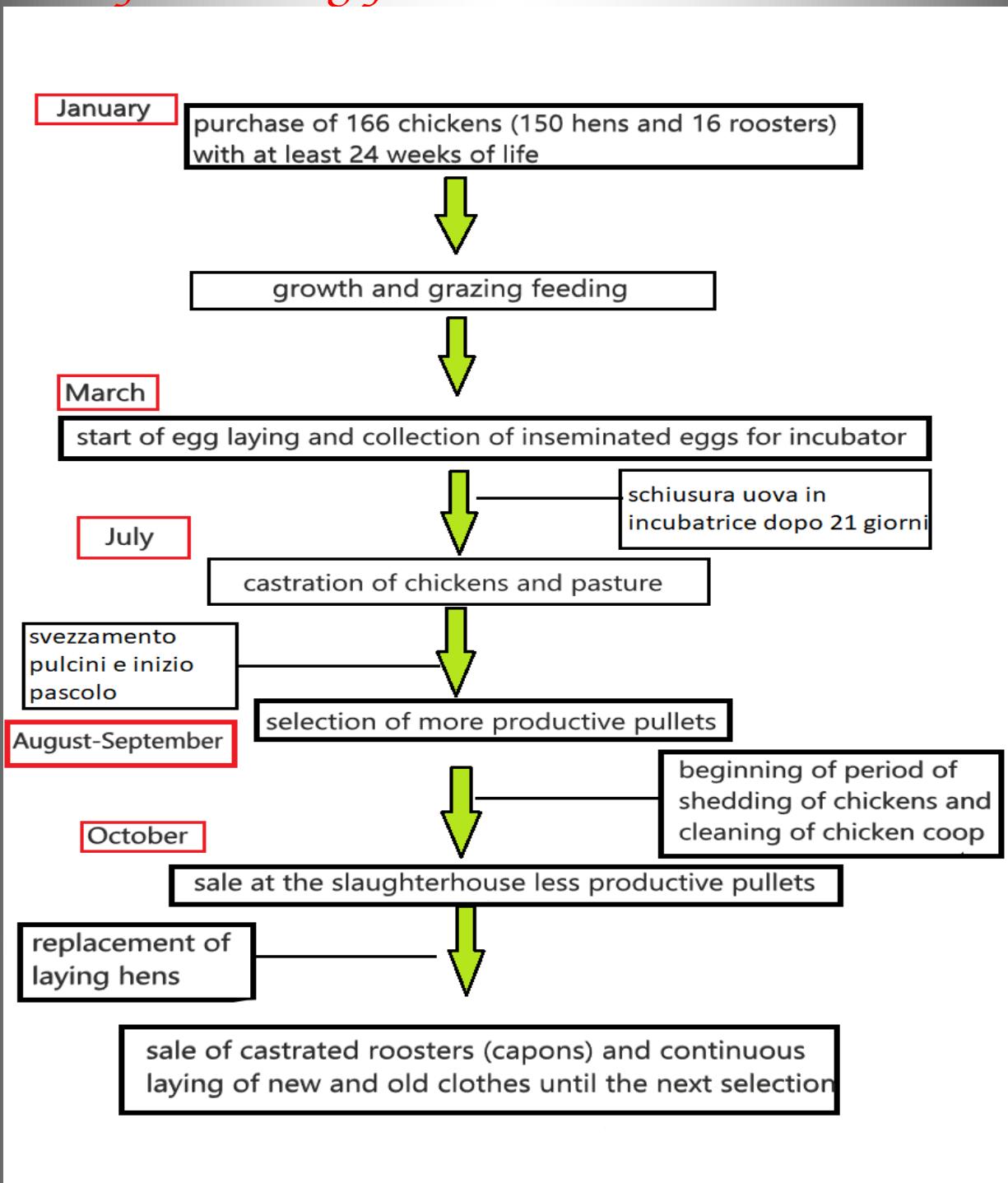


This sheepfold is a traditional night and winter shelter for sheep as they will graze all year round, which allows you to test the interaction between sheep and poultry species and verify the actual good results, thus avoiding the development of a single monoculture.

# Processing

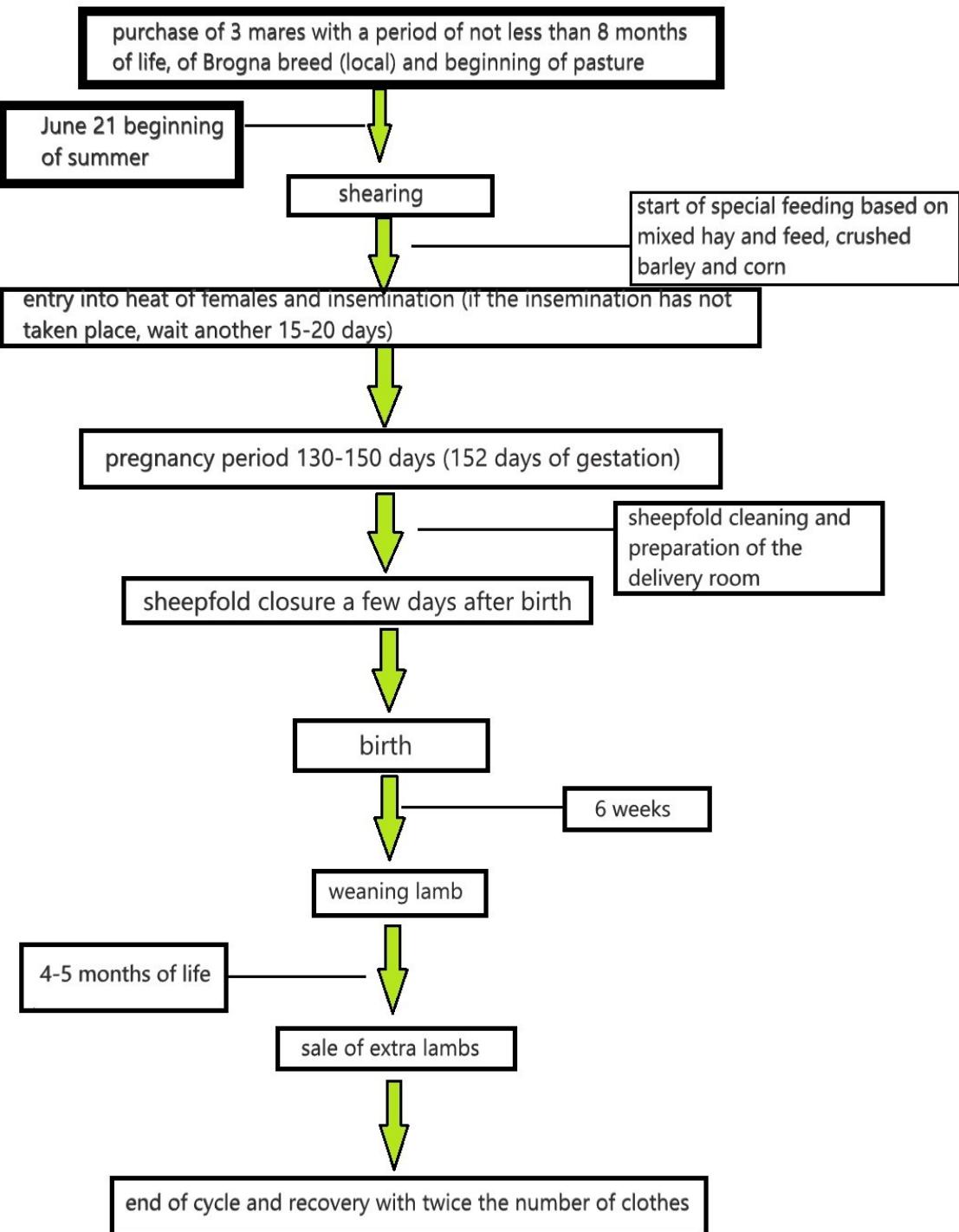
We therefore list the processes that will be done in both farms, in view of the first year. In the first year the purchase of livestock of local breeds will take place (chickens of Ermellinata di Rovigo in number of 166 animals and Brogna sheep in number of 3 animals) since they are more adapted to the aforementioned ones in the area, to reach 500 animals (in the chickens) and 15 heads (in sheep) at the end of the third year.

## Poultry breeding plan



Note well: the Ermellinata of Rovigo breed lays around 170-190 eggs per year, which will allow us to allocate eggs not only for food consumption but also for the sale of fertilized eggs for domestic chickens.

# Sheep breeding plan



*notare bene che i mangimi e gli schiacciati di mais durante il periodo di precalore verranno messi nel fondo della rastrelliera in modo che le pecore possano alimentarsi a quantità desiderata.*

# Equipment

The equipment to which we will list will be mainly new equipment, to be in step with the new IT systems that will be part of our company and will automatically or automatically facilitate management and work efficiency.

- Mobile sheep shelter
- Mobile poultry shelter
- Electrified fence and solar recharging battery
- Mixing mill
- siphon drinker for chickens
- Chicken feeder
- drinking trough for sheep
- Sheep feeder
- Mower conditioner
- tedder and swather
- square baler
- sheep rack
- Cuttings for deciduous fruit trees
- fiberglass silos
- corrugated sheet silos
- 3 incubators for chicks
- 6 weaning cages



"Mower conditioner figure 1, tedder figure 2, windrower figure 3, mixer mill figure 4, fiberglass silos figure 5, stainless steel silos figure 6 and baling machine figure 7

*Note: The chick cage of figure 1 will have a variable number over time which will increase from 6 to 10 based on the pre-established annual number of returns (334 heads per year). The same thing applies to the figure 2 incubator which can host about 100 eggs and it will also vary in the number of 3-4 incubators at 5 to meet the internal recovery needs established up to the end of the third year. The cages in figure 1 will house the chicks for at least a month, at the end of which they will then be released to pasture together with the other more productive hens thus continuing the cycle started and replacing those that will then be destined for the canteen.*



## *Products*

The products that will be sold will mainly be: "lambs, wool, broilers at the end of the laying cycle and eggs", which will supply the main local and international markets.



*"Brogna sheep figure 1, wool figure 2, Ermellinato Rovigo chicken figure 3, ermellinata Rovigo breed eggs figure 4".*



# Orchard yard

Illustrative manual of the orchard project



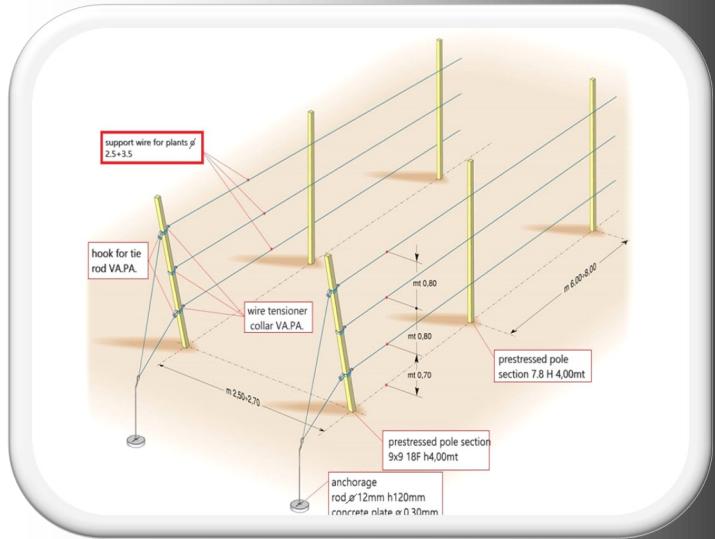
# orchard yard

In a self-sufficient farm, the orchard represents the most prominent site not only for the size it can have but also for the enormous use of manpower to which it is subjected. This falls in fact in the category zone 2, that is the area that is controlled mostly together with breeding and horticultural sites.

- Since we are dealing with orchards with intensive layouts for the most part, (just to be able to supply the huge quantities required by the wholesalers) we have analyzed what could be a new cultivation system that could bring together permacultural cultivation systems, with the new electronic / electromechanical management systems, which are increasingly coming and which guarantee optimal time management. This led to the orchard project

## Description

- Before better understanding the cultivation methods and how to proceed in the aforementioned, we concentrated mainly on the problematic issues that arose during the analysis of the orchard: "how to be able to produce more fruits of extra and 1st category in an organic / integrated cultivation, how to limit the enormous use of plant protection products in the orchard and how to also avoid the enormous waste of water (also due to water stagnation), how to better control the damage by the carpopcapsa (Cydia polmonella), and how to better manage the breeding with new terminal installations.



Sulla base di ciò abbiamo creato questo impianto di allevamento, esso si basa sulla coltivazione di un frutteto in un terreno di circa 7 ha con piante di meli (di varietà Pink lady e Fujiy) , Peri (di varietà Conference e Abate Fetel) e melograno , ove verrà predisposto un impianto con pali in cemento e con reti antinsetto (con funzione anche antigrandine) che verranno tenute aperte lateralmente nel periodo invernale e chiuse poi nel periodo di fioritura per evitare cos'è attacchi da parte della carpocapsa (cidya polmonella). In più prima di procedere al immissione delle piante, della palificazione e delle reti , verranno posati nel terreno a 1m di profondità dei dreni corrugati microforati con guaina in fibra di cocco; nelle interfile che andranno per ovviare possibili ristagni idrici che si possono creare causando attacchi funginei poco graditi .

L' impianto d'irrigazione utilizzato sarà a subirrigazione tipo netafim con controllo net beat (*vedi cantiere a seminativo e alkekengi*) avendo sempre sotto controllo ogni processo di sviluppo della piantagione e ogni goccia d' acqua utilizzato per irrigare l' impianto ovviando così anche a possibili sprechi di acqua.

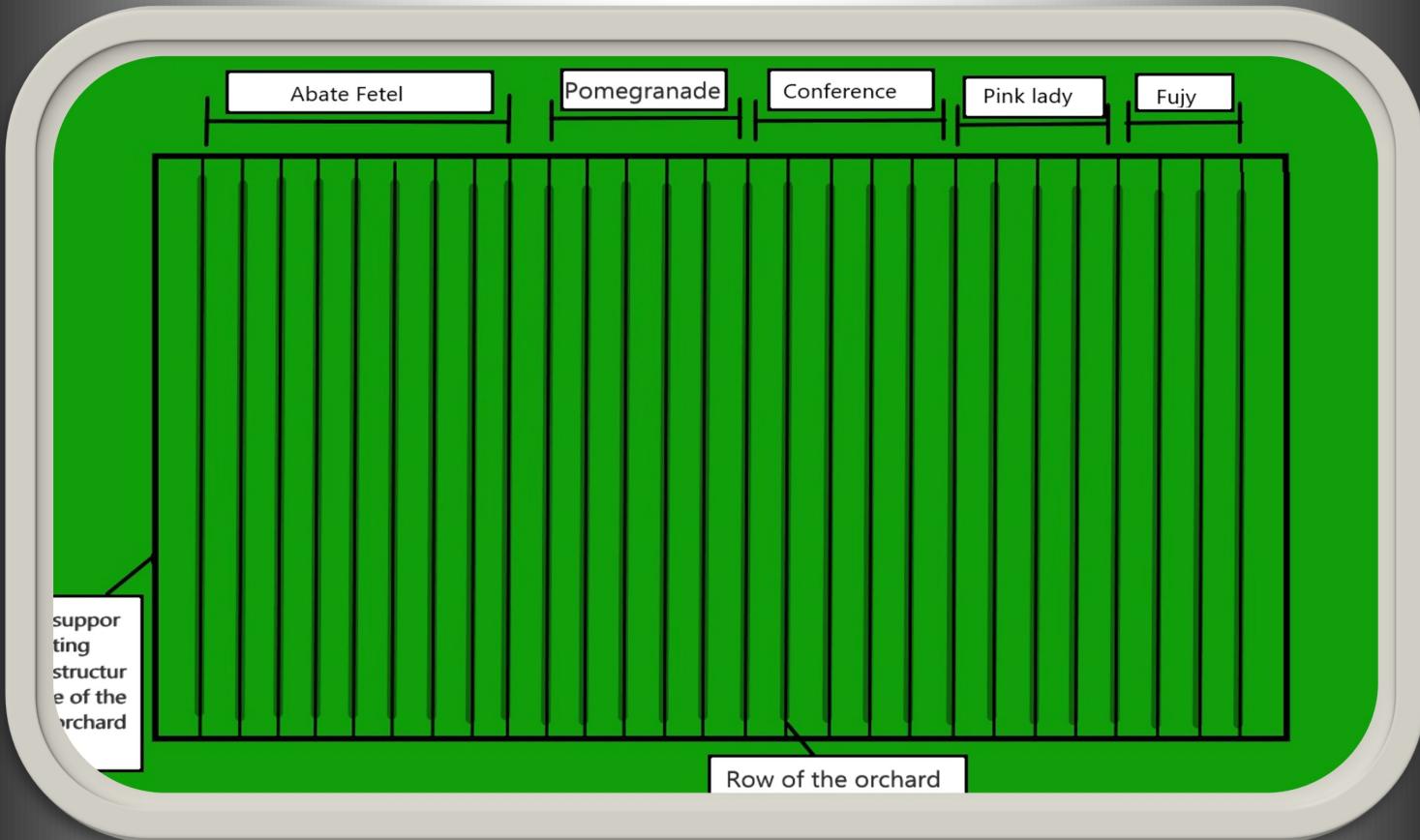


La tipologia di impianto come nelle foto ci permetterà un enorme controllo dell' erba nelle capezzagne e nelle interfile riuscendo a falciarla senza impedimenti creati dalla rete stessa che tocca a terra. Lo sfalcio dell' erba dovrà essere fatto almeno una volta la settimana e dovrà mantenere almeno un altezza di circa 5-7cm massimo da terra.



# orchard structure

.the following drawing illustrates the structure of the plant where the rows of arboreal plants of the following species (apple, pear and pomegranate) with the different varieties will be arranged.



- Inside the orchard, pheromone traps will be added to control the population inside the orchard. (Figure 2)
- At the end of each file, rose plants will be added as bioindicators to monitor and prevent possible attacks and diseases to the plants. (Figure 1)
- Weather station for continuous monitoring of the weather (figure 3).



1



2

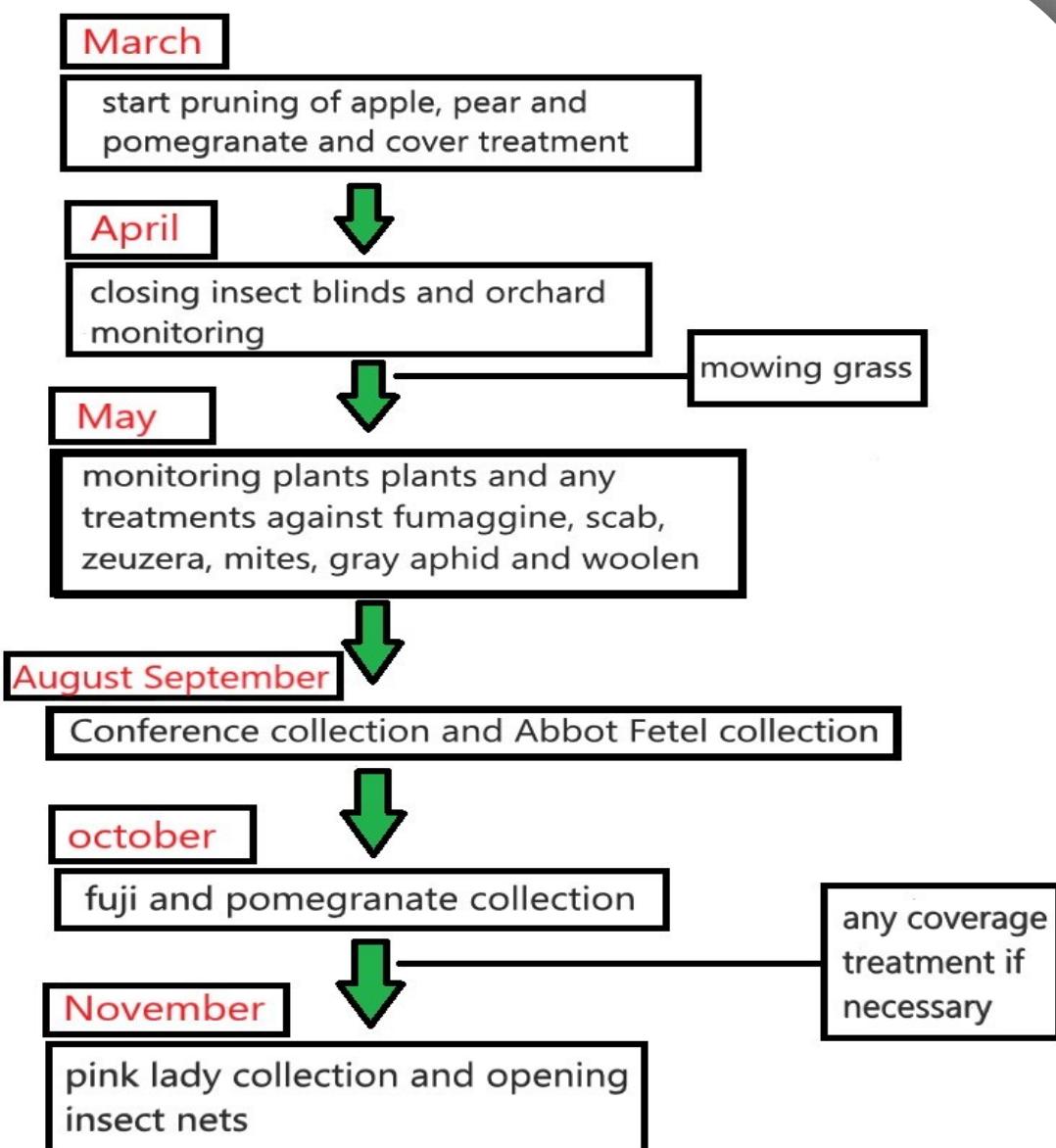


3

# Processing

The following diagram illustrates the processes that will be carried out on site every year.

Recall that the harvest takes place from the third year of life of the orchard.



every phytosanitary treatment that will be carried out will always be on a biological basis and with the use of natural products such as Portuguese pyrethrum mash etc. in order to minimize the environmental impact, however these products will also be targeted and individual in plants.

# Equipment

Below we illustrate the equipment that will be used for the cultivation of the orchard yard

- 1 Grand vision horizons forklift
- 2 Mulch shears Orizzonti mix rev multipurpose with inter-row group tsi and ecology terminal tool
- 3 self-leveling Frumaco fruit collection wagon
- 4 platform for high pruning Frumaco
- 5 Pellenc electric pruning shears
- 6 Orizzonti mechanical pruners
- 7 pneumatic pruning shears for pruning on the Frumaco platform
- 8 Ideal alsazia top atomizer
- Netafim weather station (page 8)



Remember that the horizons shredder tool will also be used in other construction sites for the maintenance of the greenery and the shredding of corn stalks at the end of the harvest.

# Special products

As already anticipated by the title, we want to launch our own brand of special products, for the first few years we will simply store and sell our 1st and extra-category fresh products in national and international markets and then subsequently we will launch our new products: "the juice apple juice, pear juice and pomegranate juice ". A series of high-niche products that reflects every special part of our orchard. For the production of the juices, extra and 1st category fruits will be used and everything will be controlled and processed in a controlled atmosphere environment; finally the juices will be packaged in glass bottles and then traced with a classifiable label with all production data written on it, and an identification code on the Ethereum Blockchain platform.





# Arable yard арable yard

Illustrative manual of the arable site project

# Arable yard

By arable land we mean all those lands used for the cultivation of wheat, corn, soybeans and other crops with a cereal-fodder background, for the production of food products that are normally basic in daily nutrition. While not focusing too much on the cultivation of arable products for the targeted use to which we want to allocate them, it is possible in every where fairs, videos on the net etc. being able to see the enormous technological innovation applied in this sector, however in a self-sufficient farm a arable land always represents an essential basis.

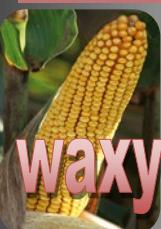
Today the enormous industrial production founded in this sector has brought enormous consequences such as: "loss of fertility and organic substance to the soil, decrease in biodiversity (caused by a massive use of plant protection products), compacting of the soil due to extreme working with equipment large and heavy and nitrogen washouts due to badly distributed chemical fertilizers. On the basis of this our project was born, the arable site which is based on the fusion of permacultural principles and new precision agriculture systems, thus ensuring excellent quantitative production with maximum respect for the cultivated land.

## description of the project

Il progetto si basa principalmente su un sistema di rotazione culturale , custodendo la fertilità del terreno e rendendolo operativo tutti i periodi dell' anno. Ciò è possibile grazie a tecniche di minima lavorazione , e innovativi sistemi di precisione ( GPS, isobus, droni ,ecc.) in grado di fornirci dati , tecniche e misurazioni per tutte le lavorazioni agricole che verranno effettuate nel cantiere in tutto l' arco dell' anno.

Le tecniche utilizzate saranno prettamente tecniche minimum tillage per frumento e soia , e strip tillage per mais, concentrate nei primi 4-5 anni di coltivazione per poi arrivare al 5°- 6° anno effettuando lavorazioni profonde (30cm massimo) quali arature o scarificature per ripristinare il normale ciclo biotico del terreno.

Le varietà utilizzate saranno varietà cerealicole antiche quali ." waxy ,marano , bianco perla e mais nero". per il mais ; nel caso del frumento saranno :" farro monocco, gentil rosso, saragolla , saraceno e rieti". Varietà non elevatamente produttive ma qualitativamente cospicue e ben richieste per vari utilizzi alimentari domestici. Per la soia invece opteremo per varietà convenzionali . Al termine del ciclo dei 5 anni arriveremo poi a creare un nostra varietà delle medesime descritte con cui ricercheremo in futuro nuovi applicazioni nel campo alimentare o industriale su cui lanceremo un nuovo mercato indipendente.



waxy



Bianco perla



mais nero



Marano



# precision systems applied

As previously mentioned, our management policy on arable land will focus on new and innovative precision systems, i.e. the set of strategies aimed at productive agronomic interventions, taking into account the biotic, chemical and physical characteristics of the soil, maintaining the all in total eco-sustainability and within a type of organic / integrated cultivation.

These systems include drones, GPS systems, isobus terminals and automatic driving applications.

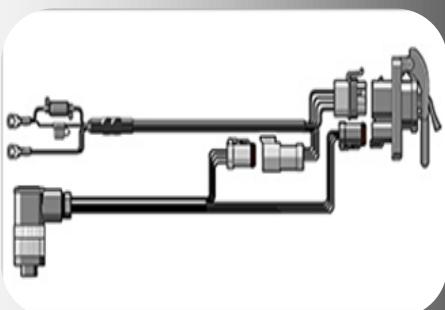
## Drone

They are robotic machines used for surveys, monitoring and precision treatments, always providing updated data on cultivation and on the ground; in addition, it is possible to act with the utmost precision also for the control of adversity and adventitious flora. The model Agras mg-1s of the DJI Phantom specific for agriculture is excellent for this purpose, also being able to provide a 10 kg tank for liquids and 4 nozzles with planned dispersion that allows to carry out precise and specific phytosanitary treatments in the areas affected by adversity, thus avoiding chemical precautions, drift effects and even possible unhealthy trampling with heavy sprayers. Thanks also to the new battery autonomy capable of lasting up to 5 continuous hours of work, the high production efficiency (up to 6000 m<sup>2</sup> in 10 minutes) and the possibility to plan the route by assigning and spraying the chosen areas, it guarantees us a optimal distribution of plant protection products and greater control of the time spent on this practice. We also remind you that the use of plant protection products will be balanced according to the need for intervention.



# Isobus

By isobus we mean all those electronic systems connected to the tractor control unit and to the agricultural implement that allow the transfer of data from the implement in work to the tractor, supporting the operator in controlling every operation performed by the implement (sowing more rows, sowing less file, distribute + or - fertilizers etc.), this system is more often than not combined with GPS antennas and terminals allowing for maximum precision work on your own terrain. This kverneland isobus type system for non-isobus agricultural machines is supplied in universal kits (useful for our isobus-free operating machines) being able to transform a non-isobus operating machine into an isobus.



## GPS and terminal

Gps antennas and terminals (type isomatch global and tellus from kverneland) are excellent for a universal isobus system since they allow instant communication with the tool by operating on it whenever necessary. In addition, the satellite autoguide, allowing the agricultural machine to work in the row set without any correction due by the operator. At the end of each process, the data processed by the tractor will be downloaded wirelessly to the central computer to store the sowing data.

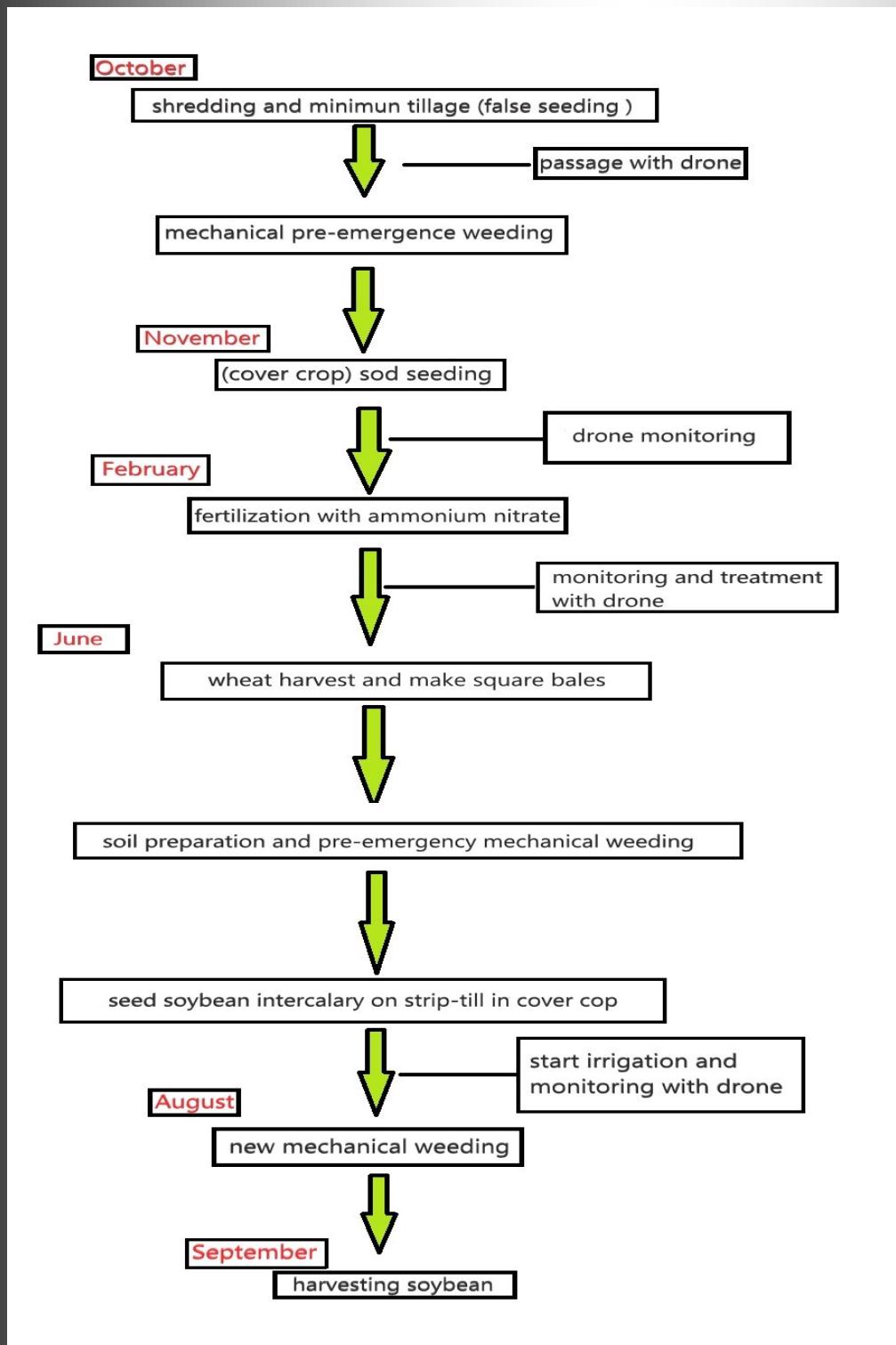
## subirrigation of corn

One innovation that we want to bring to the cultivation of corn is sub-irrigation, in addition to guaranteeing an orderly use of water, it also allows a production yield of 20-30% more in cultivation in an overall span of about 20/30 years at the end of which the drippers will then be excavated and replaced, the rest will be disposed of as waste. The following year, then in full rotary phase, it will be used for the irrigation of the interlayer soybeans during periods of summer drought. The system used will be of the netafim net beat type.

# Productive plan

## wheat and soybean cultivation plan

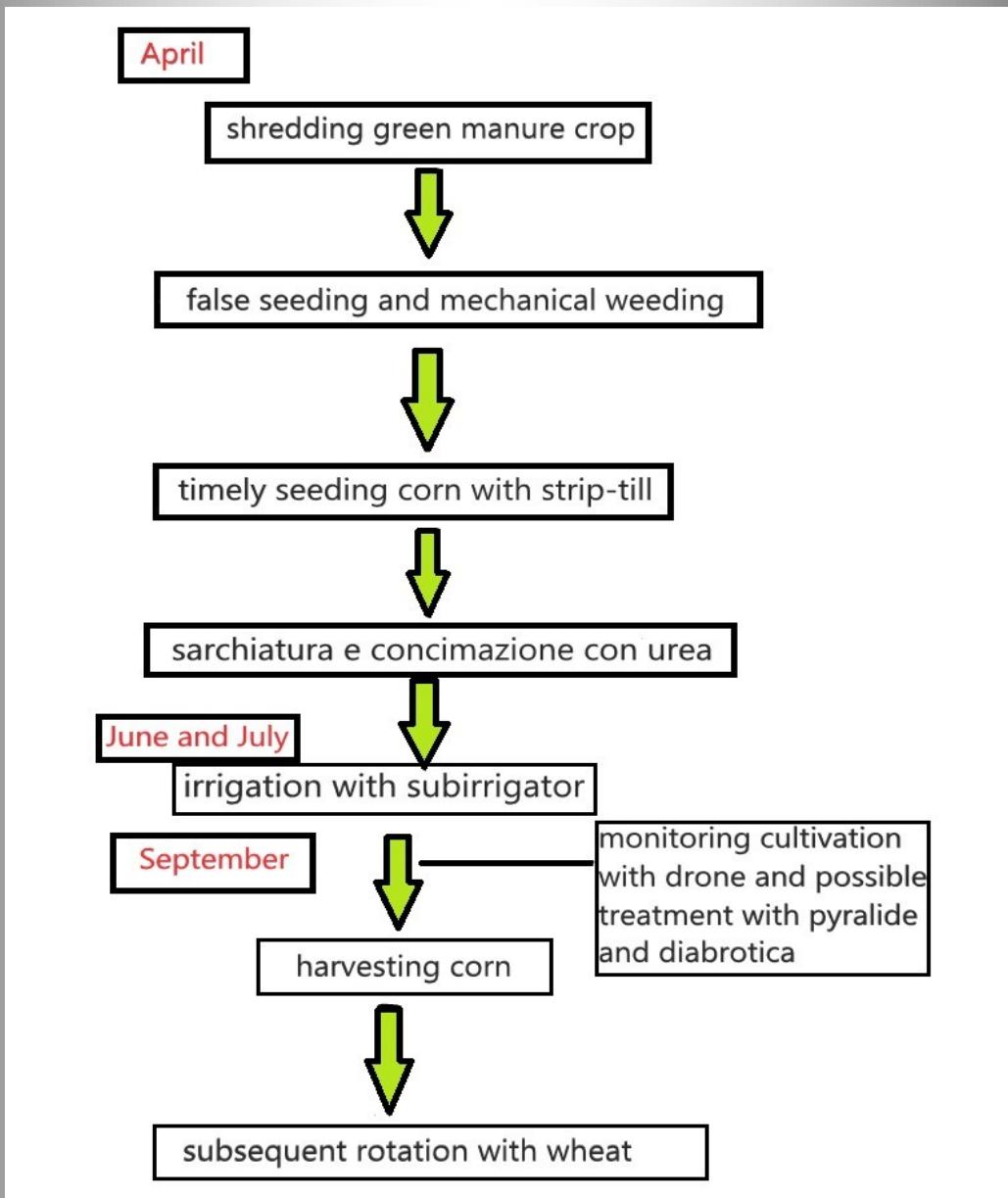
The production schemes list all the processes that will be carried out every year on the arable site in this specific case in wheat and in soybean.



We recall specifically that at the time of the soil preparation (i.e. before the passage with harrow harrow), 2 harrowing steps will be carried out on the hard, the first call for false sowing because it goes to discover the most harmful weeds that could cause problems in cultivation in the tillering / raising cycle and the second suitable for real sowing. In the 5th year, however, the intercalary cycle will be interrupted with the sowing of the velvety vetch (culture by nitrogen fixing green manure) then proceeding with the plowing and restoration of the cycle previously described.

# Corn scheme production

Below we show the production scheme with the following processes that will be carried out on the corn arable site. Remember that before the strip till and false sowing operations, a slow-effect fertilization step with organic bovine fertilizer (manure) will be carried out which will allow a gradual release of the nutrients to the soil, then transferring to the plants after sowing. This practice will then be performed alternately every 2 years.



## note

Recall that the operations of burying the drippers and the preparation of the pump unit will be carried out before the passage with mechanical weeding and after the false sowing with strip till

# Equipment

We list below the equipment that must be purchased

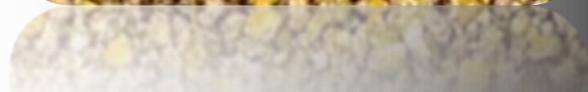
- 1 Vaderstad rapid 400c seed drill
- 2 kverneland cultistrip + DF-1 hopper
- dji phamton agras MG-1 drone (see page 31)
- kverneland isobus isomatch power kit (x2) (see page 32)
- kverneland autoguide (see page 32)
- 3 Maintec harrow harrow
- 4 Maintec weeder
- 5 Bogballe L1 plus fertilizer spreaders
- 6 double-axle dumper trailer Valzelli t-rex 160 with carpets
- 7 kverneland i-plow plow with 4 bodies
- 8 netafim sub sprinkler + subirrigators
- 9 blue drops pump group + filters



*Please note : " that the Vaderstad Rapid 400 c hard seed drill will also be used in the chicken breeding yard for sowing mixed hay in the desertified areas after the transfer of the chicken coop (see breeding yard) in order to restore the previously used pasture meadow".*

# Final product

The final products that we will obtain from the arable site will be flour and feed. The first obtained from the transformation of ancient grains (monococcocal spelled, buckwheat etc.) which will occupy only 10% of the proceeds which will then be used for self-consumption, 70% will be used for the production of feed and mixed for poultry breeding. and the remaining 20% stored in stainless steel silos (see breeding site equipment) for re-seeding in the following year. In case of overproduction, the extra part will then be sold to the cereal processing industries.



*Please note: " that the company will reach a maximum of about 100 ha on which 20-30 ha of the same will be arable land".*



# Bed and Breackfast

Illustrative manual of the bed and breakfast project



A place where the guest can feel at home and enjoy all the peace and harmony that nature can give, this is possible not only outside the house but also inside it where the four natural elements water, fire , earth and air are gathered together and offer the guest an unparalleled show, this is our Bed and Breakfast project



# *Description of the project*

A place where the guest can feel at home and enjoy all the peace and harmony that nature can give, this is possible not only outside the house but also inside it where the four natural elements water, fire , earth and air are gathered together and offer the



The completely Huf Haus architecture built with long-lasting quality materials, and fully computerized with a new electronic control system for managing humidity, heat and air, promotes an extremely unparalleled luxury home where the guest can enjoy in complete serenity and calm, total daily life in the countryside, eliminating the stress and worry of the outside world.



The proposed bungalow type art 9 model will be completely customized to create an unforgettable bed and breakfast where you can also enjoy not only the tranquility but also the products of our land, being able to spend the whole day visiting the nearest city or normal daily life. .

The delights that will be served in the room in the morning will be our gastronomic products completely from our land and local companies. The packaged products will instead be sold in the sales shop used.

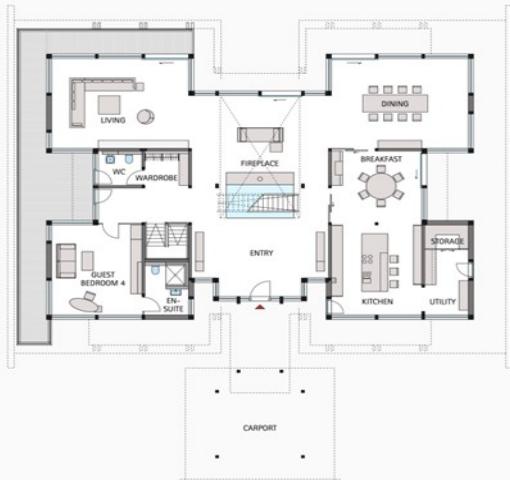


The circular gardens in the outdoor garden will be used for the sale of km0 vegetables and for gastronomic use in the Bed and Breakfast



An important page that will be added to our website will also be a page dedicated to e Commerce which will not be a simple sales page produced via the web but rather a real internet market in the decentralized ethereum platform that will allow the sale of agricultural products in other national or overseas states. To facilitate the sale and subsequently also the purchase, direct first-person videos and personalized descriptions of each individual agricultural product shown in the video will be made with a chat sale on the spot and a quick shipment once the food product has been purchased. Everything will obviously be tracked via the ethereum blockchain and personalized with the label of our farm.

The structure will be like the one described by the images on the slide, but some more details are attached, such as the bar, reception, common room and store (shop).



## central computer

An important note also goes to the central computer, that is the heart of the whole company where each connected construction site provides data and updates via wireless on every progress made in each construction site. In addition, it will manage the website in the sale and tracking part via blockchain ethereum for the food safety of our agricultural products sold via the web.



The sumptuous outdoor garden can also be used as a recreational and meditative place for the client, compensating the aforementioned for walks or simple glances at the surrounding landscape.



Datosi anche la locazione principalmente in luogo di campagna ove diviene difficile l' arrivo immediato alle città più vicine l' ospite può anche avere la possibilità di noleggiare un auto alla reception e recarsi alla meta prescelta senza nessun problema logistico. Ricordiamo che all' interno del B&B verrà creato anche un ufficio apposito dove verrà installato il computer centrale che collegato direttamente alla blockchain ethereum raccoglierà dati di ogni singolo cantiere e permetterà anche di tracciare i prodotti una volta venduti.



Le utilitarie di base ibrida potranno anche essere ricaricate nella tettoia apposita di fronte al B&B utilizzando la nostra energia elettrica aziendale senza nessun costo aggiuntivo

# Equipment

The equipment that will be used for the Bed and Breakfast will be listed below

- Bungalow art 9 (+ furniture)
- 1 external pond
- 2 electric utility cars
- 3 robotic lawnmowers
- 4 bar
- 5 canopy for electric utility vehicles
- 6 Central computer



1



2



3



4



5



6



# transformation shed



Illustrative manual of the transformation shed

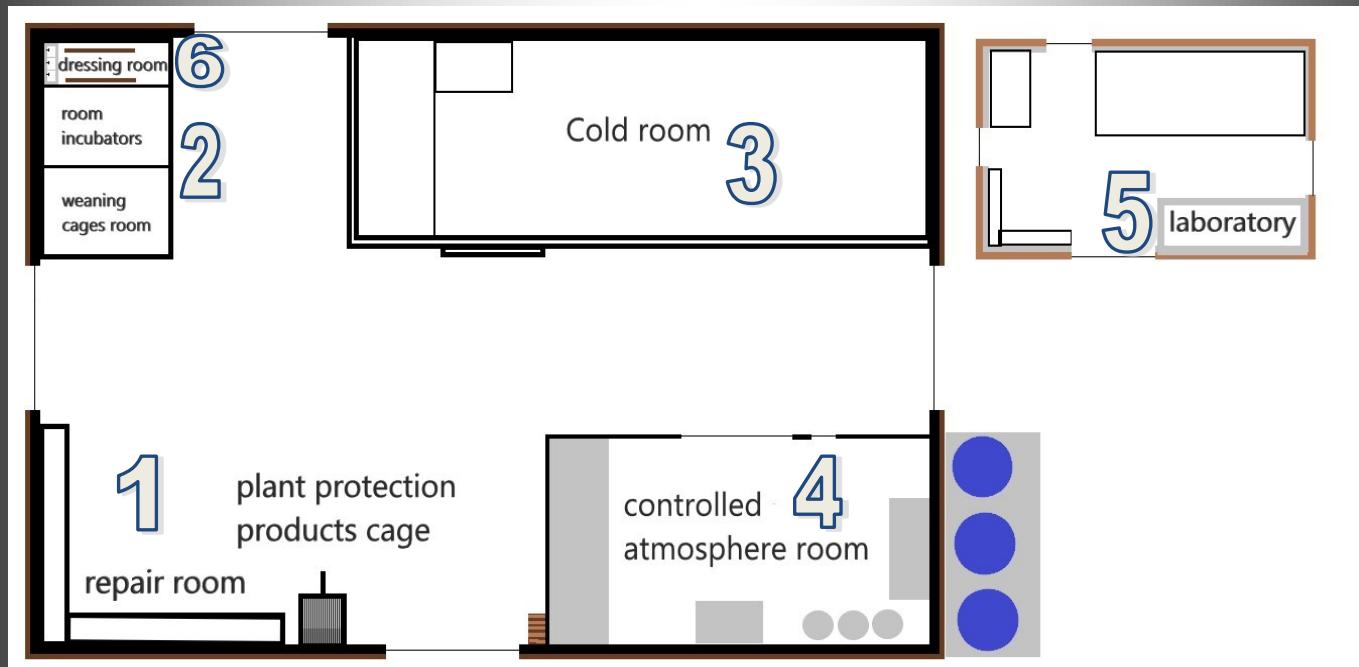


In a production sector such as agriculture, every day you have to face multiple problems such as quantity, quality, time, management and competitiveness in order to be in line with the market to which you refer. our self-sufficient project contains all the solutions to these problems but what unites them all is one thing: "energy", and this is why the transformation shed project was born, to completely close the entire transformation cycle of the products derived from construction sites and to supply electricity to them with their own efficient and low cost energy generator module.



# Description of the project

Il capannone di trasformazione è il complesso dove avverrà la trasformazione e la conservazione dei prodotti originati da ogni cantiere , Ed esso è sezionato in 5 scomparti principali con ognuno un luogo e una funzione ben specifica.



## 1 repair room

Place of maintenance of agricultural vehicles and temporary industrial repairs.

Next to it there will also be the cage of plant protection products with weigh, cabinet and atomizer to be available immediately.

## 2 incubators, and weaning cages room

Chamber with control of the incubators and the weaning cages of the chicks after the hatching of the eggs

## 3 Cold room

The storage place for fruit and alkekengi eggs before selling for fresh produce or processing. For alkekengi and eggs, separate sections will be provided inside the cell to avoid any contamination. In addition, an area for sieving and weighing before selling as a fresh product will also be set up for alkekengi and fruit.

## 4 Room controlled atmosphere

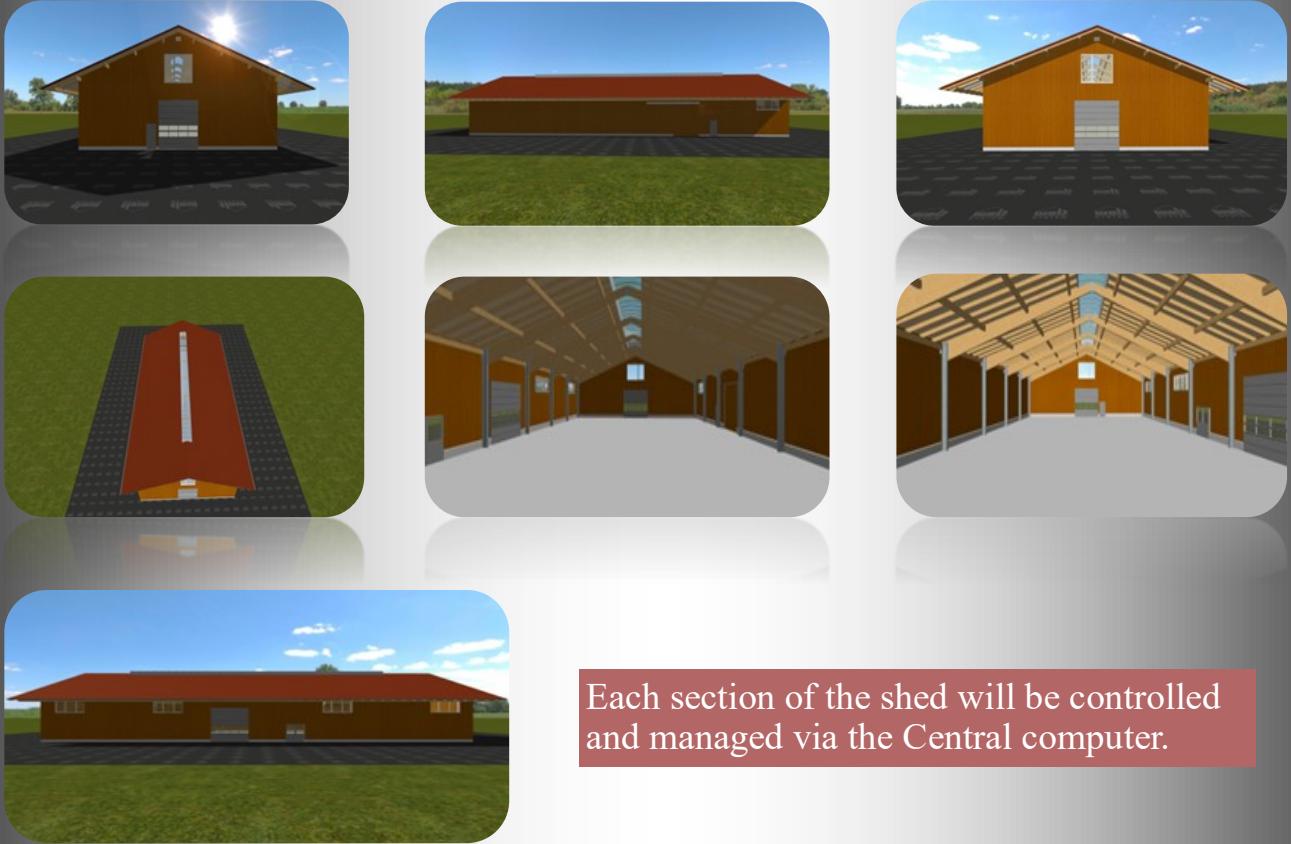
Chamber for the transformation of fruit and alkekengi where there are transformation presses and autoclaves (for storing the juice before bottling).

## 5 Laboratory

Identification and testing laboratory, mainly used for seed storage and for the creation of replacement seedlings.

## 6 dressing rooms

Private place where company employees can change their clothes and store their personal items during business hours.



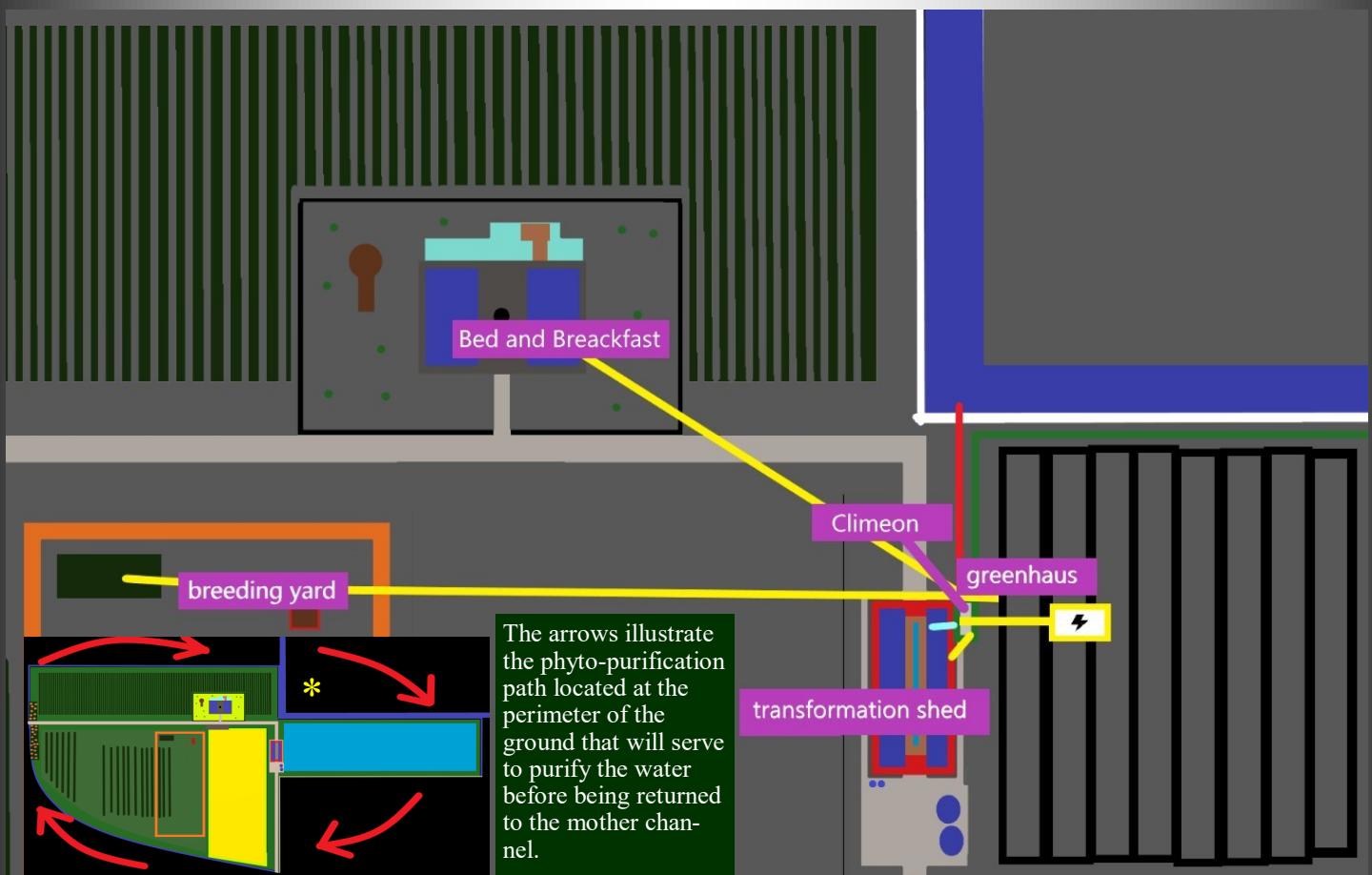
Each section of the shed will be controlled and managed via the Central computer.

## Sistema energetico Climeon

A scalable and standardized modular geothermal power plant capable of providing 150 kW of energy per single module and all monitored and controlled remotely through an automation software already present inside the module.



In our project this module is essential, so being a generator it will allow the complete energy operation of the shed, the Bed and breakfast, the greenhouses and the charging center for electric cars.



This is possible by collecting water from the canal near the east land which, being particularly fresh, collides with the hot water derived from the solar thermal panels placed on the roof of the shed, from this collision electricity will be created. Ensuring the perfect energy use of all the buildings in the company.

Once energy has been created, the waste water is not suitable and can be thrown back into the canal as it no longer has natural biological sources inside it. This is the reason why a special drain has been studied in the middle of the ground that using the shade of the plants goes to cool the hot waste water and through a phyto - purifier path with aquatic and terrestrial plants it regains its biological functions, thus being able to be returned to the mother channel without any polluting or dangerous properties for the surrounding environment.

\*Please note the two locks regulate the flow of water at the entrance and exit to avoid the return effect of the water.

# Equipment

The equipment that will be used in the transformation hall is listed below.

- Shed (Wolf System)
  - workshop tools
  - Locker room tools
- 1 Climeon  
2 cold rooms (more equipment)  
3 fruit and autoclave processing machines  
4 laboratory tools  
5 mill with stone mill  
6 electric clipper  
7 biomass boiler  
8 linde k forklift truck for narrow aisles  
9 IVECO daily curtainsider  
10 hydraulic mobile ramps



Recall that the biomass boiler will be used to heat the shed and greenhouses during the winter period.

Another category that should be highlighted in this area are agricultural machines, which are useful for field work.

Below we list the agricultural machines that will be used

- 1 New holland tv6070
- 2 Case IH luxxum 120
- 3 Antonio carraro trx ergit-s
- 4 wheel excavator with possible modification to the cabin



1



2



3



4

For any processing that requires agricultural machines with higher powers, these will be rented.

technical speaker

*Biajic Paxxon*



Bazzan Paolo 53 years old born in Lusia (RO) in 1966, electrical engineer and programmer after various professional experiences in different fields from consumer electronics, to plant engineering and assistance and maintenance of transforming machines in the industrial field, has participated in the cultivation of 'alkekengi' together with his son Biagio Bazzan also gaining knowledge in agricultural cultivation and management of the same. Today, together with his son, he participates in the Jacob's Well Farm project by researching and innovating all the decentralized apparatus that will be part of the future agricultural enterprise.



Biagio Bazzan 23 years old born in Rovigo in 1997 and residing in Lendenara (RO) for about 12 years. researcher and agricultural expert (graduated from the technical agricultural institute Ottavio Munerati of Sant'apollinare Rovigo) already undertook the cultivation of physalis alkekengi, a plant unknown to the agricultural world but with great potential in niche markets, towards the end of his higher studies school-manual knowledge in the workplace also participating in various agricultural industrial fields such as arable crops, orchards, farms and horticultural crops, then selling their fresh cultured products in the local and regional markets. This allowed him to see the positive and also the negative aspects of the agricultural industrial context, being able to understand the agricultural reality in its entirety. Today, together with his father, he participates in the Jacob's Well Farm project as application manager and construction site production manager.

