InBioWood
increasing biodiversity through wood production

LIFE12 ENV/IT/000153

WHAT TO DO TO ACHIEVE THE OBJECTIVES: THE INBIOWOOD CATALOG Sulaymaniyya (Kurdistan – IRAQ)

di Antonio Ventre

Thanks to Paolo Mori

Compagnia delle Foreste

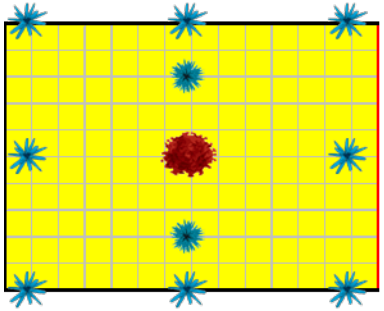
The plantations 3P (Potentially permanent polycyclic plantations)

- **POLYCYCLYC:** plants in which there are simultaneously main plants with production cycles of different lengths.

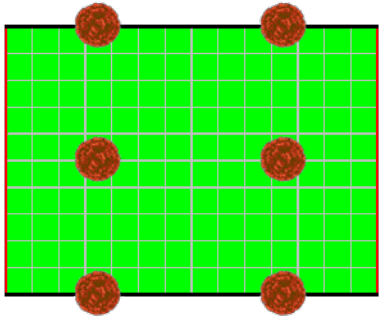
- **POTENTIALLY PERMANENT:** the plantations are made up of blocks with main plants that have cycles of different lengths. Therefore the conclusion of the individual production cycles differs over time. At the end of each cycle it is potentially possible to introduce a new production cycle, equal or different from the previous one, while the main plants of the other cycles continue to develop.

DESIGN OF THE PLANTATIONS 3P

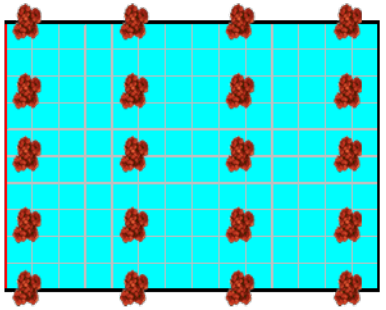
- **BLOCK:** it is the surface unit in which the plot is ideally divided



Medium long cycle



Short Cycle



Very short cycle

Each tree has own role!

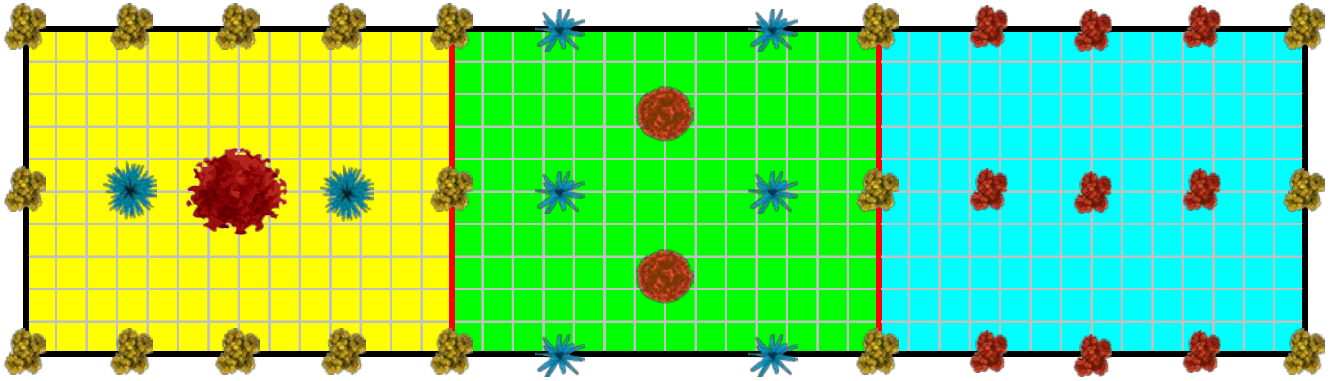
DESIGN OF THE PLANTATIONS 3P

- Each block is characterized by:

1. The surface needed for the main plants of the longest production cycle to develop their crown
2. The arboreal and shrub species that will partially or totally utilize its surface, according to their role
3. The arrangement of the plants in the block and their mutual distance on which the productive area available for each plant depends, the productive objectives, the relationships of synergy and positive competition

Per piantagioni lineari e piantagioni in pieno campo

PLANTATION LAYOUT



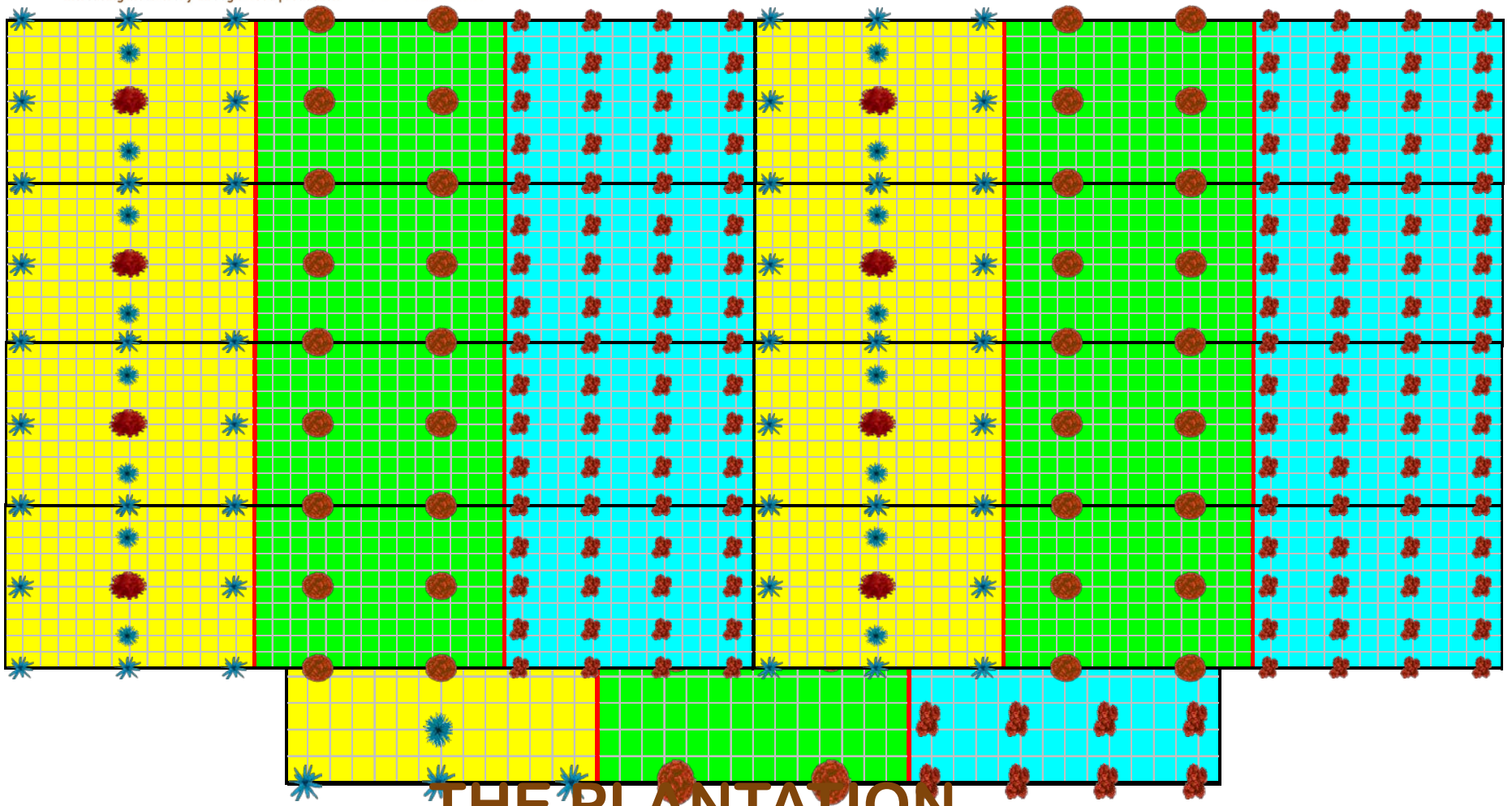
IT'S A GRAPHIC REPRESENTATION WHICH REPORT:

1. **Shape and dimensions of the block**
2. **One block or more for each one of the productive cycles choosen (MLC, SC, VSC)**
3. The mutual arrangement of main plants, double-role plants, ancillary plants

InBioWood
increasing biodiversity through wood production

LIFE12 ENV/IT/000153

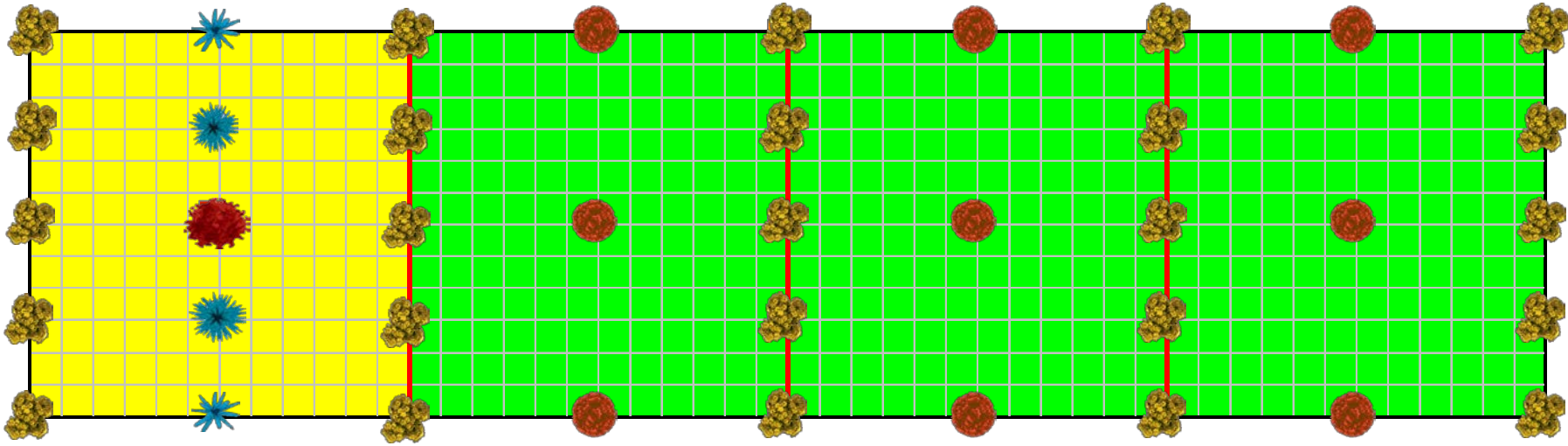
BRIEFLY.....



THE PLANTATION

The combination of blocks to be inserted in the plantation depends on the needs of the entrepreneur or the communities.

1CML_3CB



1 MLC- 3SC

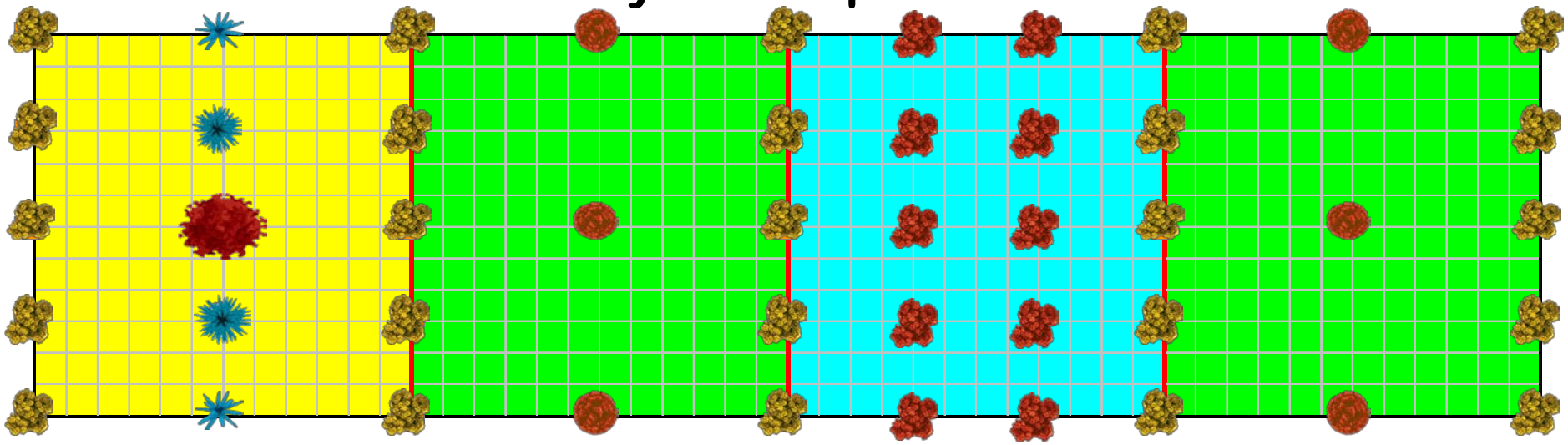
Surface 12x13 m = 156 m²

Main Plants MLC, SC

Double role plants VSC

Ancillary plants arboreal and shrub species

Wether the needs of entrepeneur or community are different or going to change along time…plantation may be adapted too

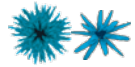


1MLC – 2SC – 1VSC

Surface 12x13 m = 156 m^2

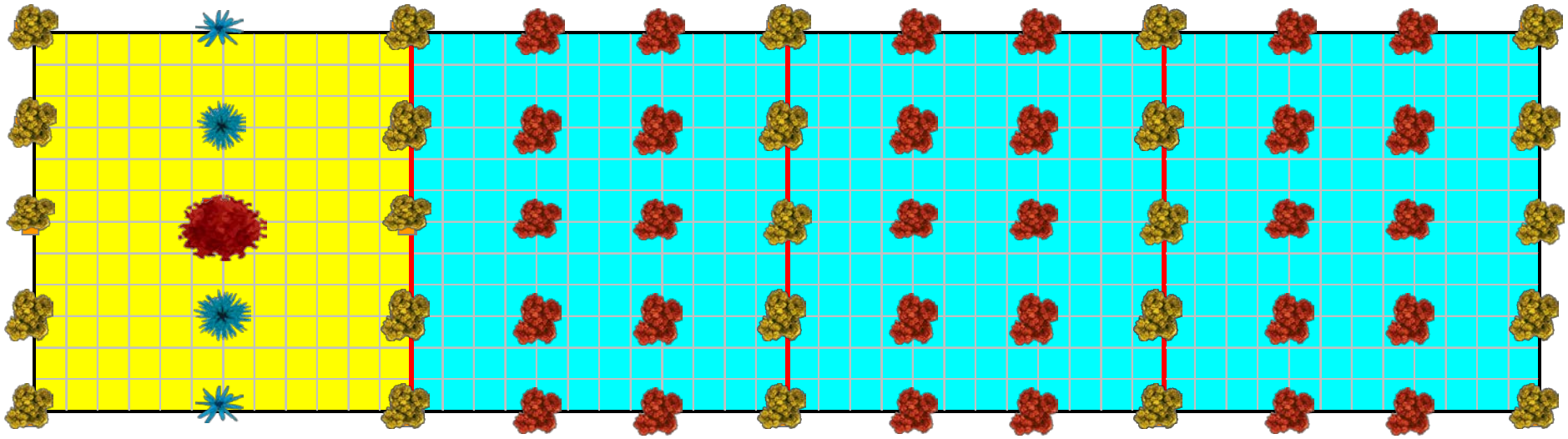
Main Plants MLC, SC

Double role plants VSC



Ancillary plants arboreal and shrub species

…you can change according to the needs and objectives …..



1MLC – 3VSC

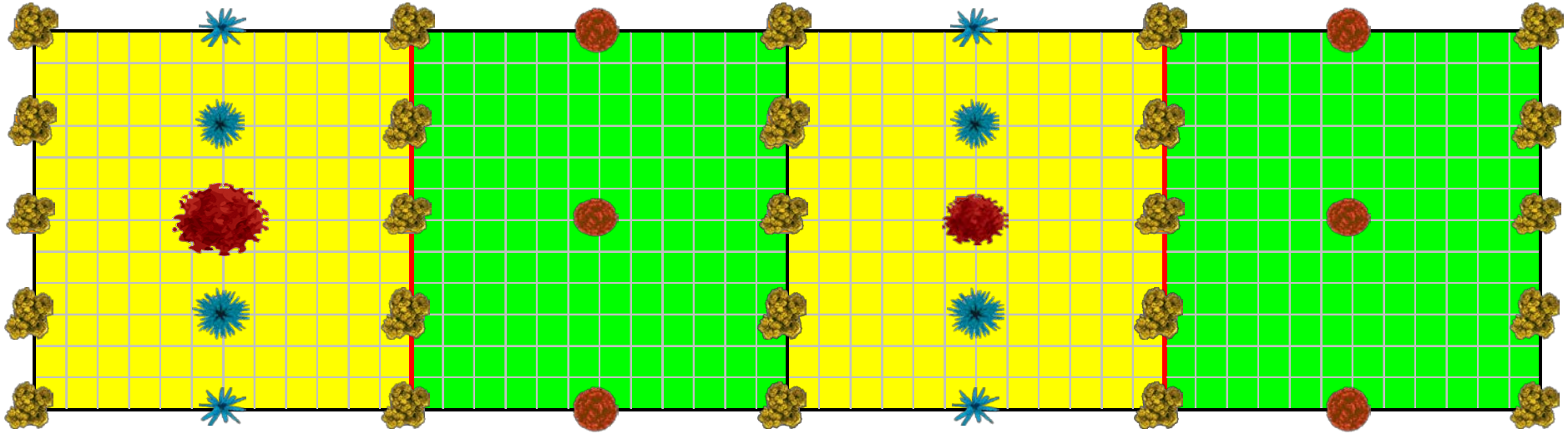
Superficie 12x13 m = 156 m²

Main Plants MLC, SC

Double role plants VSC

Ancillary plants arboreal and shrub species

….more logwood…or more wood for buildings or handcrafts…and so on..



1MLC – 1SC

Superficie 12x13 m = 156 m²

Main Plants MLC, SC

Double role plants VSC

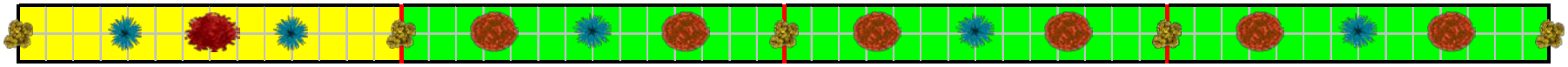
Ancillary plants arboreal and shrub species

InBioWood
increasing biodiversity through wood production

LIFE12 ENV/IT/000153

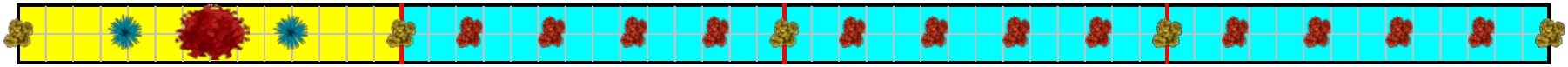
We have the same flexibility also designing linear plantations

1CML_3CB



1CML.2CB-1CBB

1CML-3CBB



1CML-1CB

InBioWood
increasing biodiversity through wood production

LIFE12 ENV/IT/000153

The INBIOWOOD CATALOG

All the plant layouts created for the LIFE + InBioWood project were collected on a catalog that can be downloaded from the site **www.inbiowood.eu**

58 layouts for open field plantations

15 layouts for linear plantations

CONCLUSIONS

The block design allows to tune different carachteristics:

- **Byodiversity**:
  - **Different species for relating productive cycles**
  - **Presence of** ancillary plants - arboreal and shrub species
  - **none fertilizers**
  - **The alternance of the different cycles (MLC-SC-VSC) avoids a sudden reset of habitat .**

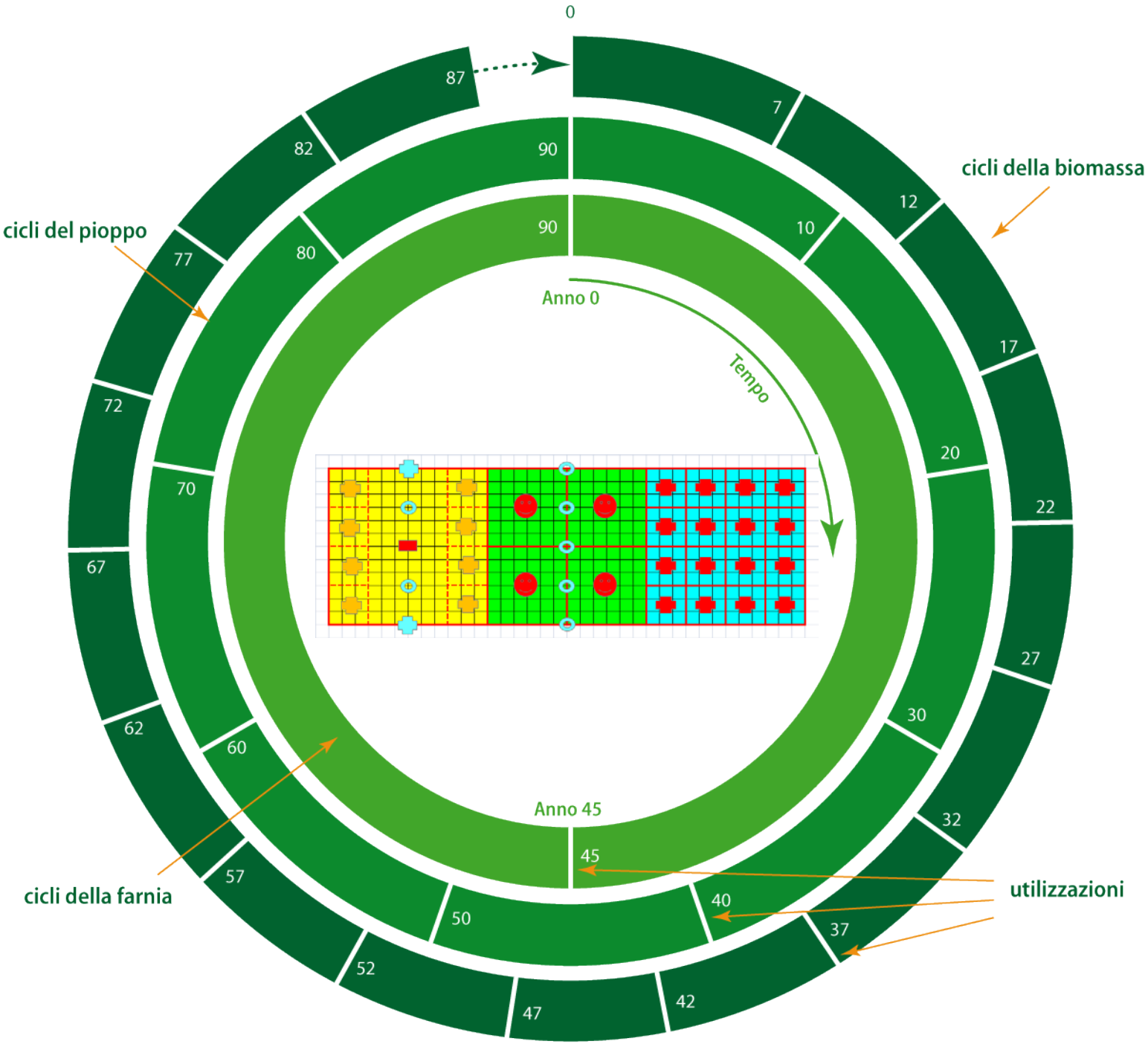
InBioWood
increasing biodiversity through wood production

LIFE12 ENV/IT/000153

CONCLUSIONS

The block design allows to tune different carachteristics:

- **<u>Multipurpose Plantations and better use of the space</u>:**
  - **According to the needs it's possible to modulate, during design phase, number and composition of the blocks**
  - **Simultaneous presence of trees and shrubs with different roles and functions, allows to satisfy several objectives along next years**
  - The right combination of plants that have different growth rates allows to better exploit the available space and to increase the capabilities of the plantation at the same time.


0
7
12
17
22
27
30
32
37
40
42
47
50
52
57
60
62
67
70
72
77
80
82
87
90
90
10
20
Anno 0
Tempo
Anno 45
45
cicli della biomassa
cicli del pioppo
cicli della farnia
utilizzazioni