Pilot farms visited on May 19th, 2017

During the visit to Platanias pilot area, the pilot farms 28.01 (citrus) and 11.01 (olive) were visited. The location of the 2 farm is depicted on the following map of the pilot area:

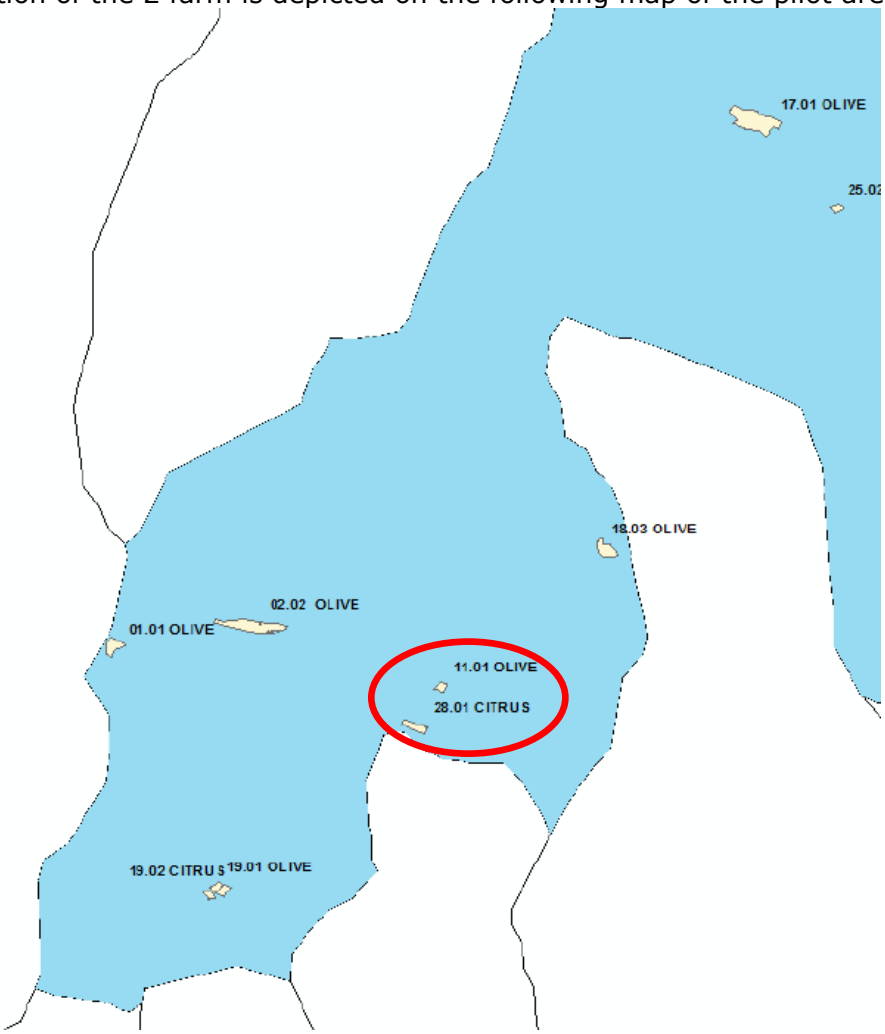

Figure 1: Location of the two pilot farms

Some basic characteristics of the 2 farms are presented in the following paragraphs.

1. Farm 11.01.

The following characteristics were recorded for the farm as representative of the typical status during the last few years before the selection:

- Farmer / Manager: Thomakis Stylianos
- Crop: Olive
- Coordinates: Latitude 482590.48, Longitude 3925255.01.
- Size: 0.4 ha / 80 trees
- Tree age: 36 years
- Water management: Irrigated / drip irrigation
- Agrochemicals management: Conventional farm
- Mean yield: 7,5 tn/ha (considered typical for the area)
- Annual irrigation applied (empirical application):
    - 25 mm/year (very low compared to actual needs)

- Fertilizing:
  - Nitrogen: NO
  - Phosphorus: NO
  - Potassium: NO
  - Boron: NO
- Fertigation: NO
- Foliar application of nutrients: NO
- Organic material applied: NO
- Orchard Management:
  - Soil tillage: NO
  - Weed mowing: YES
  - Cover crops: NO
  - Grazing: NO
  - Pruning: Yes (1 per year / winter)
  - Shredding of prunings: NO
- Plant protection
  - Number of applications per year: 2 (typical for the area)

Based on the above data, the farm is an irrigated one, although application of irrigation water is minimal, despite the fact that there are no limitations of water availability. It has been selected as a conventional olive orchard with typical yield for the area, where most of the proposed practices have not been applied (typical situation in most orchards according to the existing reports of Action C.2). Moreover, the orchard has ease of access for a demonstration farm and the farmer was ranked as having good collaboration in the project. Finally, the farm is ranked in the group of non-high slope orchards, with low risk of erosion.

The list of agricultural practices to be applied in pilot farm 11.01 are presented below. Already applied practices during the visit are highlighted in red color.

1. **Weed mowing**: It has already been applied during the visit in the demonstration plot. Farmer has applied chemical weed control in the control plot.
2. **No weed control during winter** (October – first half of spring): Has been applied during winter in both parts of the field.
3. **Cover crops**: To be applied during autumn/winter 2017.
4. **No soil tillage**: Already applied in both parts of the field during the visit.
5. **Winter pruning**: Already applied during last winter, by the contractor in demonstration plot and by farmer in control plot.
6. **Shredding of prunings**: Already applied by the contractor in demonstration plot. Not applied by the farmer.
7. **Summer pruning**: To be applied during summer.
8. **Application of transpiration-reducing products**: To be applied during summer.
9. **Application of organic material**: Already applied by the contractor in demonstration plot. Not applied by the farmer.
10. **Fertilizing based upon leaf and soil analysis**: A fertilizing schedule has been issued based on winter leaf and soil analyses. This included N application in the soil during winter (already applied) and K application during summer through fertigation (to be applied). Aminoacids were also applied during spring by foliar application. In the control plot, farmer has applied N and K in the soil during winter, based on empirical judgement.
11. **Fertigation**: To be applied during summer in demonstration plots only

12. **Foliar application of nutrients**: Aminoacid application already applied in demonstration plots. Not applied by farmer in control plots.
13. **Irrigation network**: To be completed soon. Not in place during the visit.
14. **Application of irrigation based upon meteorological data / Deficit irrigation**: To be applied.

From the monitoring equipment, access tubes for measuring soil moisture were in place in both control and demonstration plots during the visit.

Figure 2: Aerial view of farm 11.01 (Google Earth)

2. Farm 28.01.

The following characteristics were recorded for the farm as representative of the typical status during the last few years before the selection:

- Farmer / Manager: Antonogiannaki Maria
- Crop: Citrus - Orange
- Coordinates: Latitude 482272.01, Longitude 3925199.70.
- Size: 2 ha / 1000 trees
- Tree age: 36 years
- Water management: Irrigated / drip irrigation
- Agrochemicals management: Conventional farm
- Mean yield: 40 tn/ha (within the typical range)
- Annual irrigation applied (empirical application):
  - 300 mm/year (relatively low compared to crop needs, but typical among the available farms)
- Fertilizing:
  - Nitrogen (N): 117 kg/ha
  - Phosphorus (P_2O_5): NO
  - Potassium (K_2O): 138 kg/ha
- Fertigation: YES
- Foliar application of nutrients: NO

- Organic material applied: NO
- Orchard Management:
    - Soil tillage: NO
    - Weed mowing: YES (2)
    - Cover crops: NO
    - Grazing: NO
    - Pruning: Yes (1 per year / winter)
    - Shredding of prunings: NO
- Plant protection
    - Number of applications per year: 3 (typical depending on pest problems)

Based on the above data, the farm represents a typical irrigation scheme for the area, with existing fertigation equipment (typical in many citrus orchards) and the general status of the orchard was considered as a well-maintained compared to the average status for the area. A conventional management is applied, which is typical for citrus orchards in the area where farmers still invest a significant effort. As in all cases, the orchard has ease of access for a demonstration farm and the farmer was ranked as having good collaboration so far in the project. Finally, the farm is ranked in the group of non-high slope orchards, with low risk of erosion (typical situation for citrus orchards in the area).

The list of agricultural practices to be applied in pilot farm 28.01 are presented below. Already applied practices during the visit are highlighted in red color.

1. **Weed mowing**: It has already been applied during the visit in the demonstration plot. Farmer has applied weed control within rows in the control plot.
2. **No weed control during winter** (October – first half of spring): Has been applied during winter in both parts of the field.
3. **Cover crops**: To be applied during autumn/winter 2017.
4. **No soil tillage**: Already applied in both parts of the field during the visit.
5. **Winter pruning**: Already applied during last winter, by the contractor in demonstration plot and by farmer in control plot.
6. **Summer pruning**: To be applied during summer.
7. **Application of organic material**: Already applied by the contractor in demonstration plot. Not applied by the farmer.
8. **Fertilizing based upon leaf and soil analysis**: A fertilizing schedule has been issued based on winter leaf and soil analyses. This included N application in the soil during winter (already applied) and K application during summer through fertigation (to be applied). Foliar application of B, Zn and Mg was also completed in demonstration plots. In the control plot, farmer has applied N in the soil during early spring, based on empirical judgement.
9. **Fertigation**: To be applied during summer in both parts of the field.
10. **Foliar application of nutrients**: Already applied in demonstration plots. Not applied so far by farmer in control plots.
11. **Irrigation network**: To be completed soon. Not in place during the visit..
12. **Application of irrigation based upon meteorological data / Deficit irrigation**: To be applied.

From the monitoring equipment, access tubes for measuring soil moisture were in place in both control and demonstration plots during the visit.

Figure 3: Aerial view of farm 28.01 (Google Earth)