

Mainprotocol workpackage T 3.10

1. Selected and installed HIPs (region-specific)
2. Completed field work installation (region-specific)
3. Planned measuring campaign 2012
4. Field work manual

1. Selected and installed HIPs

Finland

Plot ID	03	07	06	10	09	21	25	26
specification	Mono		Mono		Mono		3-Species-Mix	
species	<i>Betula sp.</i>		<i>Picea abies</i>		<i>Pinus sylvestris</i>		<i>Betula sp.</i> <i>Picea a.</i> <i>Pinus s.</i>	

Poland

Plot ID	01	24	83	168	50	80	51	14	107	163	
specification	Mono		Mono		Mono		Mono		3-Sp.		5-Sp.
species	<i>Picea abies</i>		<i>Pinus sylvestris</i>		<i>Quercus robur</i>		<i>Betula sp.</i>		<i>Carpinus betulus</i>		<i>Picea a.</i> <i>Pinus s.</i> <i>Quercus r.</i> <i>Betula sp.</i> <i>Carpinus b.</i>

Romania

Plot ID	51	118	18	90	07	08	137	44	88	14	
specification	Mono		Mono		Mono		2-Sp.		3-Sp.		4-Sp.
species	<i>Fagus sylvatica</i>		<i>Abies alba</i>		<i>Picea abies</i>		<i>Abies a.</i> <i>Fagus s.</i>		<i>Picea a.</i> <i>Fagus s.</i> <i>Abies a.</i>		<i>Fagus s.</i> <i>Picea a.</i> <i>Abies a.</i> <i>Acer c.</i>

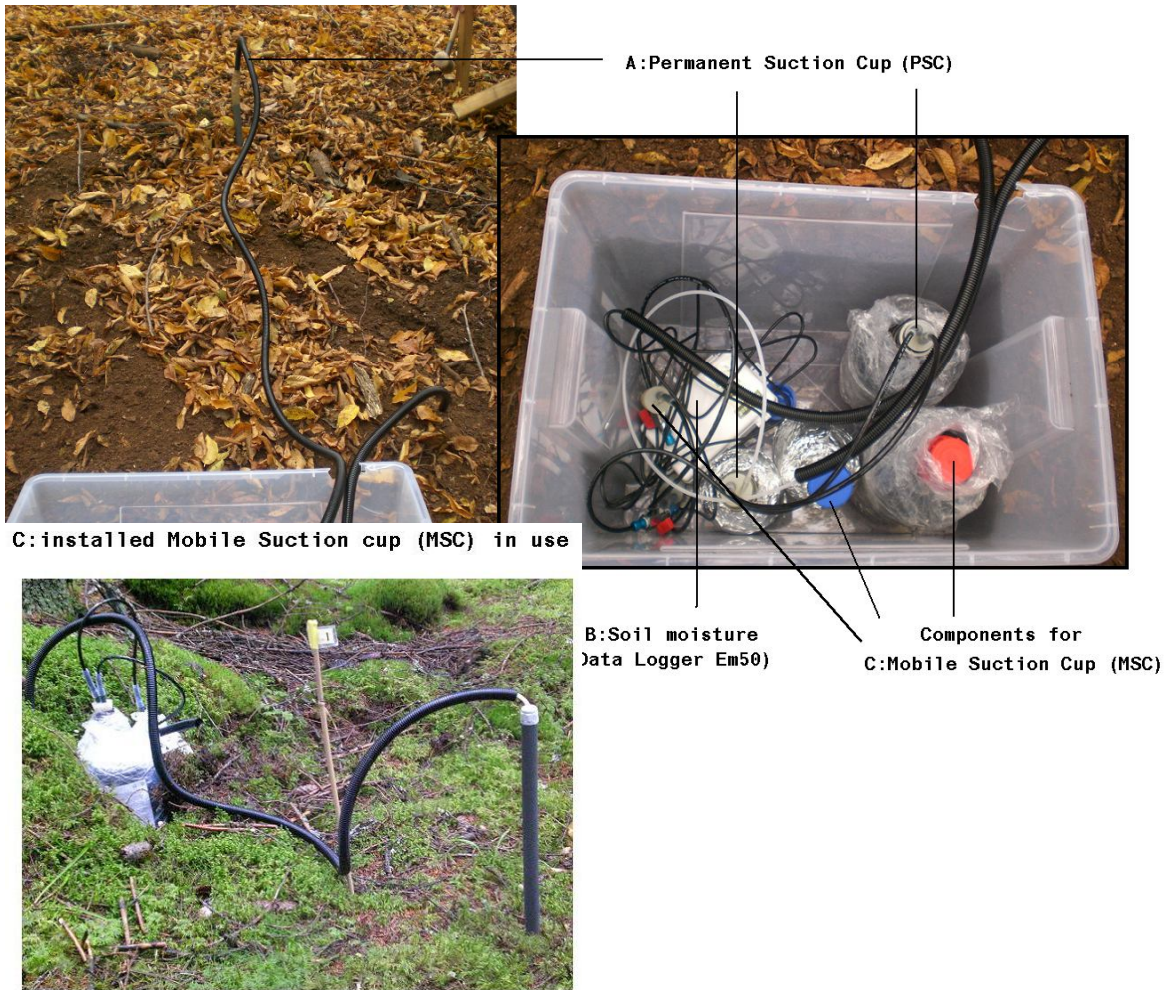
Italy

Plot ID	11	102	41	114	22	35	110	16	101	115	113
specification	Mono		Mono		Mono		Mono		3-Sp.		5-Sp.
species	<i>Quercus petraea</i>		<i>Quercus cerris</i>		<i>Castanea Sativa</i>		<i>Ostrya Carp.</i>		<i>Quercus Ilex</i>		<i>Quercus p.</i> <i>Quercus c.</i> <i>Castanea s.</i> <i>Quercus p.</i> <i>Quercus c.</i> <i>Castanea s.</i> <i>Ostrya c.</i> <i>Quercus i.</i>

Spain

Plot ID	09	10	15	17	19	20	02	07
specification	Mono		Mono		Mono		3-Species-Mix	
species	<i>Quercus faginea</i>		<i>Pinus nigra</i>		<i>Pinus sylvestris</i>		<i>Quercus f.</i> <i>Pinus n.</i> <i>Pinus syl.</i>	

2. Completed field work installation



D: Deposition sampler



the state of affairs:

		A: Permanent Suction cup	B: Soil moisture Data logger	C: Mobile Suction cup	D: Depo. Sampler	E: Meteo-Logger
Finland						
	03	X	X	X	01 02 03	Not planned so far, Stations in the vicinity
	07	X	X			
	06	X	X	X		
	10	X	X	X		
	09	X	X	X		
	21	X	X	X		
	25	X	X	X		
	26	X	X	X		
Poland						
	01	X	X	Will be carried out at the beginning of the measuring campaign	01 02 03	6 are needed and planned
	24	X	X			
	83	X	X			
	168	X	X			
	50	X	X			
	80	X	X			
	51	X	X			
	14	X	X			
	107	X	X			
	163	X	X			
	One further plot (3-Spe.-Mix) is planned					
Romania						
	51	X	Not yet	Will be carried out at the beginning of the measuring campaign	01 02 03	No decision so far, at least 3 are needed
	118	was broken, change in spring	Not yet			
	18	X	X			
	90	X	Not yet			
	07	X	Not yet			
	08	X	Not yet			
	137	X	Not yet			
	44	X	Not yet			
	88	X	Not yet			
	14	X	Not yet			
Italy						
	11	X	X	Will be carried out at the beginning of the measuring campaign	01 02 03	4 were bought, not yet installed
	102	X	X			
	41	X	X			
	114	X	X			
	22	X	X			
	35	X	X			
	110	X	X			
	16	X	X			
	101	X	X			
	115	X	X			
	113	X	X			
Spain						
	09	X	X	Will be carried out at the beginning of the measuring campaign	01 02 03	No decision so far, waiting for offers, at least 3 are needed, 1 for each cluster
	10	X	X			
	15	X	X			
	17	X	X			
	19	X	X			
	20	X	X			
	02	X	X			
	07	X	X			

Open questions:

- FVA can make 13 rain gauge samplers available for the project (Who needs?)
- The Italian Team (Andrea) needs a vacuum pump (?) (Who also needs?)
- Lab bottles for romanian sites (Who also needs)
- I need all addresses for sending back lab bottles
- What about the data loggers (Em50) for the romanians sites? Stand of affairs?
- Deposition samplers (coordinates?)
- Marking of previous MSC sampling point crucial for further Measurements

- One data logger (Em50) for Poland (Bogdan/Dawid), who can make available (Olivier?Fernando?)
- > 2 data loggers (Em50) from the Spanish team still lying in my office (how they may be used?)
- > 1 data logger (Em50) will remain at the romanians site. (how it may be used?)

Alterra needs shared relevant data:

- The litterfall, i.e. dry mass, leaf area (SLA) and elemental composition (C, N, P, S, Ca, Mg, K, pH) of leaves, branches and reproductive organs for all site-specific tree species (TIII.7).
 - At all sites or also only HIPs
 - Litterfall - It's sampled how? (Point measuring by net?)
 - Who will measure the ingredients? Only N+C?

- Nitrogen content of leaves of (a) mature and (b) abscised leaves of all tree species present giving N resorption information for all site-specific tree species (TIII.6).

- Belowground nitrogen (T III.6) and carbon stocks (TIV2) at the study plots in the organic soil horizon and in the mineral soil layers: 0-10 cm, 10-20 cm, 20-40 cm.

Most important months (yellow mark the time windows of possible wet period) of the year for sampling. In view of aims inside these periods measurements ought to be realized.

		Jan	Feb	Mrz	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1	Finland												
2	Poland												
3	Romania												
4	Germany												
5	Italy												
6	Spain		?								?		

Timetable/Plan for measuring campaign 2012/2013 should give an optimal resolution.

BUT: Sampling depends on capacity of time and availability of personnel, and on time exposure according the accessibility of the plots. It should be basis of discussion!

One Day of sampling includes:

- A: Collecting water out of the permanent suction cup and reinstalling of vacuum pressure
 → Estimated time needed per plot: **5 min**
- B: Downloading of soil moisture data (data logger Em50)
 → Estimated time needed per plot: **5 min**
 (But: once a month should be sufficient)
- C: Collecting water out of the mobile suction cup, reinstallation of the MSC device at a new sampling point and reinstalling of vacuum pressure
 → Estimated time needed per plot: **15 min**
- D: Collecting water out of the deposition samplers and cleaning up of samplers
 → Estimated time needed per sampling point: **5 min**
- E: Downloading of Meteo-data
 → Estimated time needed per sampling point: **5 min**

Total time needed for one sampling day for task 3.10. (only sampling time): ~ 3.5 hours