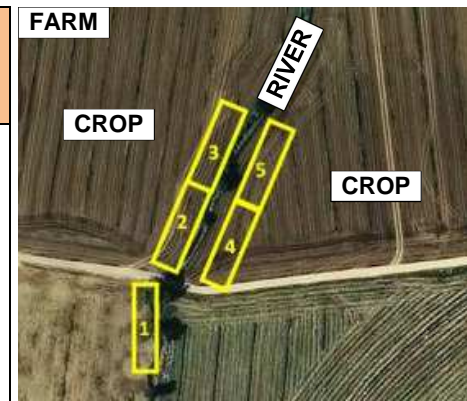


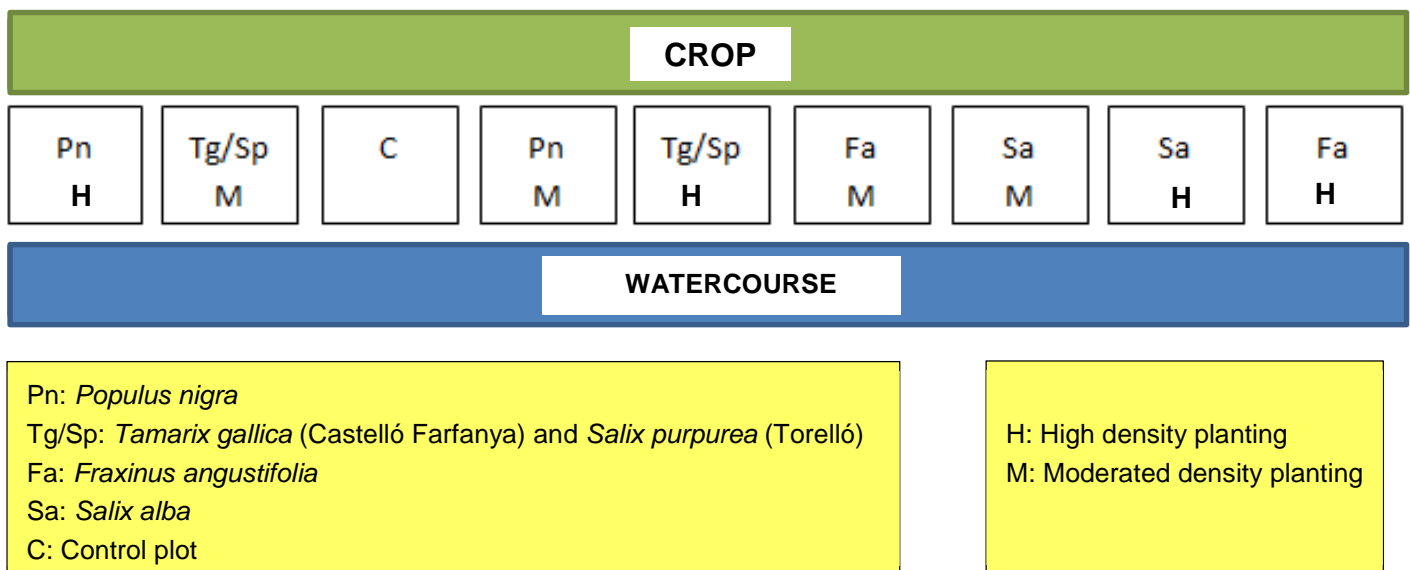
Riparian buffers

Characteristics	Site 1 Castelló de Farfanya (CF)	Site 2 Torelló (T)
Replications	5	3
Area (m ²)	3150	1890
Watercourse	Farfanya stream	Martorell stream
Cereal crop	Irrigated maize + barley	Non irrigated maize + barley
Height (amsl)	270	538
Mean rainfall (mm)	531	710



Scheme of a demonstrative unit

- ✓ It includes 9 experimental treatments (plots sized 7x10 m²) combining 4 species and 2 densities
- ✓ Each unit is replicated 5 times (CF) and 3 times (T)
- ✓ Planting date: February 2014 (CF) and March 2014 (T)
- ✓ Density planting: 0,65 x 0,75 (high density) and 1 x 1 (moderated density)
- ✓ Seedlings: 2560 (CF) and 1536 (T)



Management 2014

- ✓ **Planting:** February (CF) and March (T)
- ✓ **Individual shelters:** Before herbicide treatment (CF and T)
- ✓ **Herbicide treatment:** February (CF), May (T) and July (CF)
- ✓ **Manual scrub clearing:** July (CF) and December (CF and T)
- ✓ **Profile description and soil sampling:** June (CF and T)
- ✓ **Ion exchange resins:** December 2014 (CF)

Profile description and soil sampling



Photo A: Profile detail
Photo B: Soil sampling

0-15 cm (Ap): Moderately compact. Lime-clay texture. Organic matter accumulation.

15-50 cm (B1): Highly compact. Lime-clay texture

50-(60) cm (BC): Moderately compact. Sandy texture

Soil sampling depth

Castelló de Farfanya	Torelló
5-15 cm	5-15 cm
20-45 cm	25-45 cm
50-55 cm	50-55 cm

Ion exchange resins

- ✓ Installation of 60 resins at two depths
- ✓ December 2014
- ✓ 2 treatments + control:
 - *Fraxinus angustifolia* and *Tamarix gallica* (CF)
 - *Fraxinus angustifolia* and *Salix purpurea* (T)

Main problems detected

- ✓ Weeds
- ✓ Mortality of seedlings (see percentages on table below)

	Fa	Pn	Sa	Sp	Tg	Total
Castelló	21,72	45,77	50,57		27,23	36,32
High density	27,44	47,95	51,54		32,05	39,74
Moderated d.	16,00	43,60	49,60		22,40	32,90
Torelló	46,73	70,11	38,03	37,09		47,99
High density	41,45	72,22	32,05	40,17		46,47
Moderated d.	52,00	68,00	44,00	34,00		49,50
Total	31,09	54,90	45,86	37,08	27,22	40,69

