Supplementary Material

Submergence of forage legumes: *Lotus* species show better tolerance than *Trifolium* and *Melilotus* species due to their superior recovery after stress

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Fig. S1. Scheme of the experiment: The gray bar represents the control treatment, the purple bar indicates the short submergence treatment of 5 days, and the green bar indicates the long submergence treatment of 10 days. The black arrows denote the initial harvests before the submergence treatments on day 0 and day 5. The white arrows indicate the harvest times for all three treatments: on the day of submergence (day 10) and at the end of the experiment (day 28) to analyze recovery. The striped-purple bar in the short submergence treatment of 5 days indicates that the plants were not submerged until day 5. An additional harvest was carried out on day 5 to obtain initial (control) values for that treatment. Then, the 5-day treatment was applied until day 10, when harvests for all treatments were conducted. This protocol allowed the desubmergence of plants on the same day, ensuring recovery under the same environmental conditions.
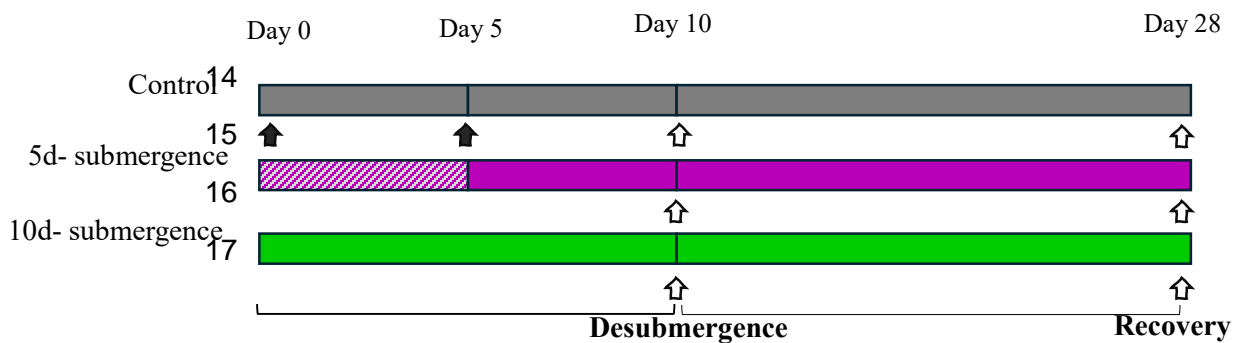
Table S1. Mean dry biomass values (bold font, in g per plant) and their standard errors for the compartments of leaves, stems/stolons, crowns and roots for (a) desubmergence and (b) recovery for species of *Lotus* and *Trifolium*, separated into the 3 treatments of control, short submergence of 5 days, and long submergence of 10 days.

a) Desubmergence				
Control (C)				
Sp./Comparments	Leaves	Stems/Stolons	Crowns	Roots
Lotus tenuis	**0,513** 0,039	**0,530** 0,037	**0,039** 0,003	**0,326** 0,025
Lotus corniculatus	**0,646** 0,065	**0,336** 0,023	**0,038** 0,003	**0,330** 0,030
Lotus japonicus	**0,532** 0,034	**0,471** 0,021	**0,026** 0,002	**0,207** 0,012
Trifolium repens	**0,539** 0,043	**0,751** 0,034	**0,054** 0,007	**0,484** 0,041
Trifolium fragiferum	**0,539** 0,061	**0,613** 0,038	**0,106** 0,017	**0,432** 0,056
Trifolium pratense	**0,640** 0,061	**0,682** 0,026	**0,062** 0,007	**0,652** 0,041
Short submergence (5d)				
Sp./ Comparments	Leaves	Stems/Stolons	Crowns	Roots
Lotus tenuis	**0,383** 0,033	**0,462** 0,039	**0,037** 0,001	**0,206** 0,017
Lotus corniculatus	**0,417** 0,073	**0,429** 0,083	**0,049** 0,006	**0,398** 0,051
Lotus japonicus	**0,300** 0,031	**0,481** 0,056	**0,025** 0,002	**0,267** 0,068
Trifolium repens	**0,285** 0,037	**0,440** 0,035	**0,036** 0,006	**0,318** 0,035
Trifolium fragiferum	**0,288** 0,030	**0,479** 0,033	**0,077** 0,007	**0,302** 0,031
Trifolium pratense	**0,293** 0,025	**0,510** 0,013	**0,052** 0,004	**0,429** 0,035
Long submergence (10d)				
Sp./ Comparments	Leaves	Stems/Stolons	Crowns	Roots
Lotus tenuis	**0,257** 0,039	**0,489** 0,032	**0,030** 0,003	**0,191** 0,013
Lotus corniculatus	**0,219** 0,017	**0,344** 0,017	**0,041** 0,003	**0,198** 0,014
Lotus japonicus	**0,169** 0,021	**0,410** 0,023	**0,022** 0,002	**0,116** 0,014
Trifolium repens	**0,199** 0,030	**0,344** 0,028	**0,036** 0,003	**0,296** 0,026
Trifolium fragiferum	**0,180** 0,046	**0,366** 0,025	**0,045** 0,004	**0,240** 0,027
Trifolium pratense	**0,214** 0,038	**0,341** 0,052	**0,039** 0,005	**0,343** 0,041
b) Recovery				
Control (C)				
Sp./ Comparments	Leaves	Stems/Stolons	Crowns	Roots
Lotus tenuis	**0,675** 0,063	**0,973** 0,112	**0,079** 0,017	**0,470** 0,057
Lotus corniculatus	**0,451** 0,074	**0,686** 0,104	**0,083** 0,009	**0,443** 0,055
Lotus japonicus	**0,235** 0,050	**0,555** 0,046	**0,044** 0,006	**0,369** 0,029
Trifolium repens	**0,340** 0,064	**0,739** 0,045	**0,093** 0,011	**0,831** 0,079
Trifolium fragiferum	**0,333** 0,078	**0,908** 0,092	**0,138** 0,021	**0,569** 0,081
Trifolium pratense	**0,577** 0,139	**0,634** 0,075	**0,105** 0,009	**0,517** 0,067
Short submergence (5d)				
Sp./ Comparments	Leaves	Stems/Stolons	Crowns	Roots
Lotus tenuis	**0,412** 0,086	**0,884** 0,090	**0,046** 0,005	**0,360** 0,048
Lotus corniculatus	**0,123** 0,025	**0,388** 0,060	**0,050** 0,005	**0,219** 0,043
Lotus japonicus	**0,229** 0,026	**0,635** 0,090	**0,051** 0,005	**0,190** 0,025
Trifolium repens	**0,129** 0,021	**0,545** 0,049	**0,052** 0,007	**0,280** 0,074
Trifolium fragiferum	**0,120** 0,031	**0,439** 0,064	**0,064** 0,012	**0,167** 0,033
Trifolium pratense	**0,085** 0,021	**0,100** 0,013	**0,053** 0,005	**0,168** 0,037
Long submergence (10d)				
Sp./ Comparments	Leaves	Stems/Stolons	Crowns	Roots
Lotus tenuis	**0,202** 0,059	**0,619** 0,091	**0,048** 0,007	**0,299** 0,041
Lotus corniculatus	**0,179** 0,033	**0,466** 0,050	**0,039** 0,005	**0,220** 0,046
Lotus japonicus	**0,149** 0,038	**0,325** 0,084	**0,040** 0,004	**0,066** 0,016
Trifolium repens	**0,067** 0,012	**0,244** 0,022	**0,032** 0,005	**0,149** 0,053
Trifolium fragiferum	**0,149** 0,038	**0,325** 0,084	**0,040** 0,004	**0,066** 0,016
Trifolium pratense	**0,078** 0,025	**0,151** 0,041	**0,040** 0,009	**0,096** 0,046