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Supplement of

Root growth, water uptake, and sap flow of winter wheat in response to different soil water conditions

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Supplement

Table S1. RMSE, ME and d (see Eq. 14, 15 and 16) of the soil water content (SWC) and soil water pressure head (SWP) for the Feddes-Jarvis (FJ) and Couvreur (C) models in the three plots (P1: sheltered; P2: rainfed; P3: irrigated) of the stony (F1) and silty (F2) soils.

		SWC						SWP					
		P1		P2		P3		P1		P2		P3	
		FJ	C	FJ	C	FJ	C	FJ	C	FJ	C	FJ	C
		cm ³ cm ⁻³		cm ³ cm ⁻³		cm ³ cm ⁻³		log ₁₀ ([-cm])		log ₁₀ ([-cm])		log ₁₀ ([-cm])	
F1	RMSE	0.0241	0.0226	0.0324	0.0301	0.0238	0.0246	0.7315	0.6740	0.4874	0.5159	0.3162	0.3131
	ME	-0.0017	-0.0036	-0.0074	-0.0087	-0.0019	0.0012	-0.0014	0.0491	0.0607	0.0994	0.0312	0.0040
	d	0.9330	0.9440	0.9121	0.9248	0.9398	0.9357	0.8453	0.8770	0.9011	0.8943	0.6530	0.6300
F2	RMSE	0.0460	0.0471	0.0490	0.0457	0.0654	0.0606	0.5451	0.5354	0.6378	0.6403	0.6656	0.6171
	ME	0.0001	0.0058	0.0311	0.0261	0.0476	0.0404	0.1017	0.0262	-0.0397	0.0474	0.0405	0.1712
	d	0.8502	0.8479	0.7843	0.8027	0.6120	0.6329	0.6145	0.6069	0.7630	0.7078	0.5421	0.5073

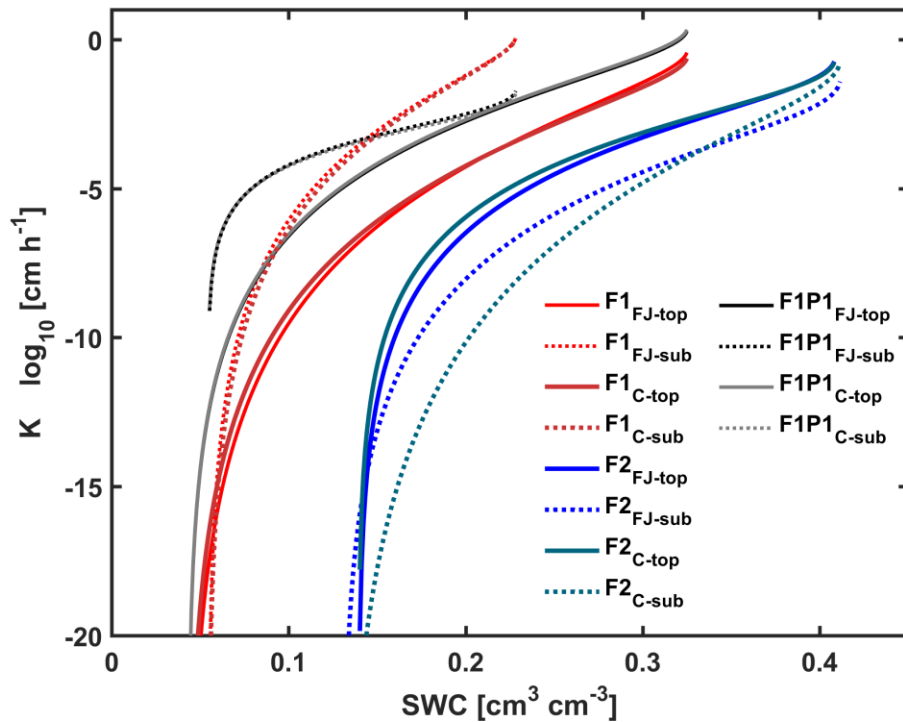


Figure S1. Relation between soil water content (SWC) and soil hydraulic conductivity (K) that was obtained by the Feddes-Jarvis (FJ) and Couvreur (C) models in the top- and subsoil of the stony (F1), the sheltered plot of the stony soil (F1P1), and silty (F2) soils.

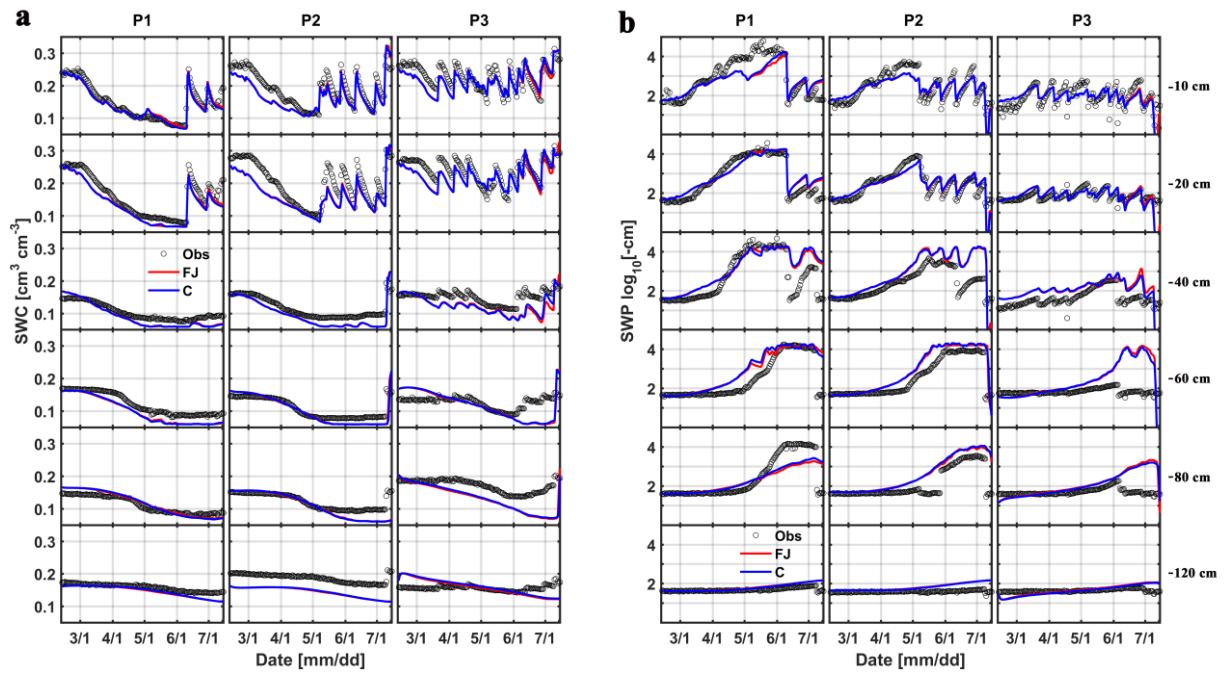


Figure S2. Simulated (a) soil water content (SWC) and (b) soil water pressure head (SWP) by the Feddes-Jarvis (FJ) and Couvreur (C) models at different depths in depths in the three plots (P1: sheltered; P2: rainfed; P3: irrigated) of the stony soil using the parameters that were obtained from the sheltered plot of the stony soil.