

Table S1. amount of irrigation water applied prior to the date of stem water potential (Ψ_{stem}) measurement and number of days prior to stem water potential measurement date on which rainfall occurred, in both the irrigation seasons considered.

Date of irrigation event	Water Applied m^3ha^{-1}	Date of SWP measurement	Irrigation event before Ψ_{stem} measurement (days)	Rain event before Ψ_{stem} measurements (days)
07/06/21	55	08/06/21	1	7
27/07/21	53	28/07/21	1	10
17/08/21	55	19/08/21	2	32
15/10/21	51	18/10/21	3	8
14/06/22	51	15/06/22	1	5
22/07/22	54	25/07/22	3	12
28/08/22	55	29/08/22	1	4
12/10/22	50	13/10/22	1	3

Table S2. Monthly irrigation water applied and monthly rainfall in both the irrigation seasons considered.

	Monthly irrigation volume (m^3)		Monthly rainfall (mm)	
	2021	2022	2021	2022
June	214	296	10.01	18.99
July	206	338	6.42	9.43
August	170	305	19.59	20.48
September	126	247	53.28	80.03
October	83	125	115.56	45.64
Total amount	799	1311	204.83	174.57

Table S3. amount of water applied per each date of irrigation during both the irrigation seasons considered.

2021	m3/ha	2022	m3/ha
01/06/21	40	04/06/22	43.00
07/06/21	42	07/06/22	44.00
14/06/21	43	14/06/22	41.00
22/06/21	41	18/06/22	41.00
30/06/21	48	21/06/22	44.00
05/07/21	42	24/06/22	43.00
12/07/21	41	28/06/22	40.00
19/07/21	41	01/07/22	42.00
27/07/21	40	05/07/22	43.00
31/07/21	42	08/07/22	41.00
11/08/21	43	14/07/22	43.00
17/08/21	41	19/07/22	44.00
21/08/21	44	22/07/22	41.00
31/08/21	42	26/07/22	44.00
04/09/21	41	29/07/22	40.00
21/09/21	43	03/08/22	45.00
30/09/21	42	06/08/22	45.00
09/10/21	42	10/08/22	45.00
15/10/21	41	14/08/22	45.00
Total	799	18/08/22	42.00
		24/08/22	41.00
		28/08/22	42.00
		04/09/22	41.00
		10/09/22	40.00
		14/09/22	42.00
		20/09/22	41.00
		24/09/22	41.00
		29/09/22	42.00
		04/10/22	42.00

	09/10/22	42.00
	12/10/22	41.00
	Total	1311.00

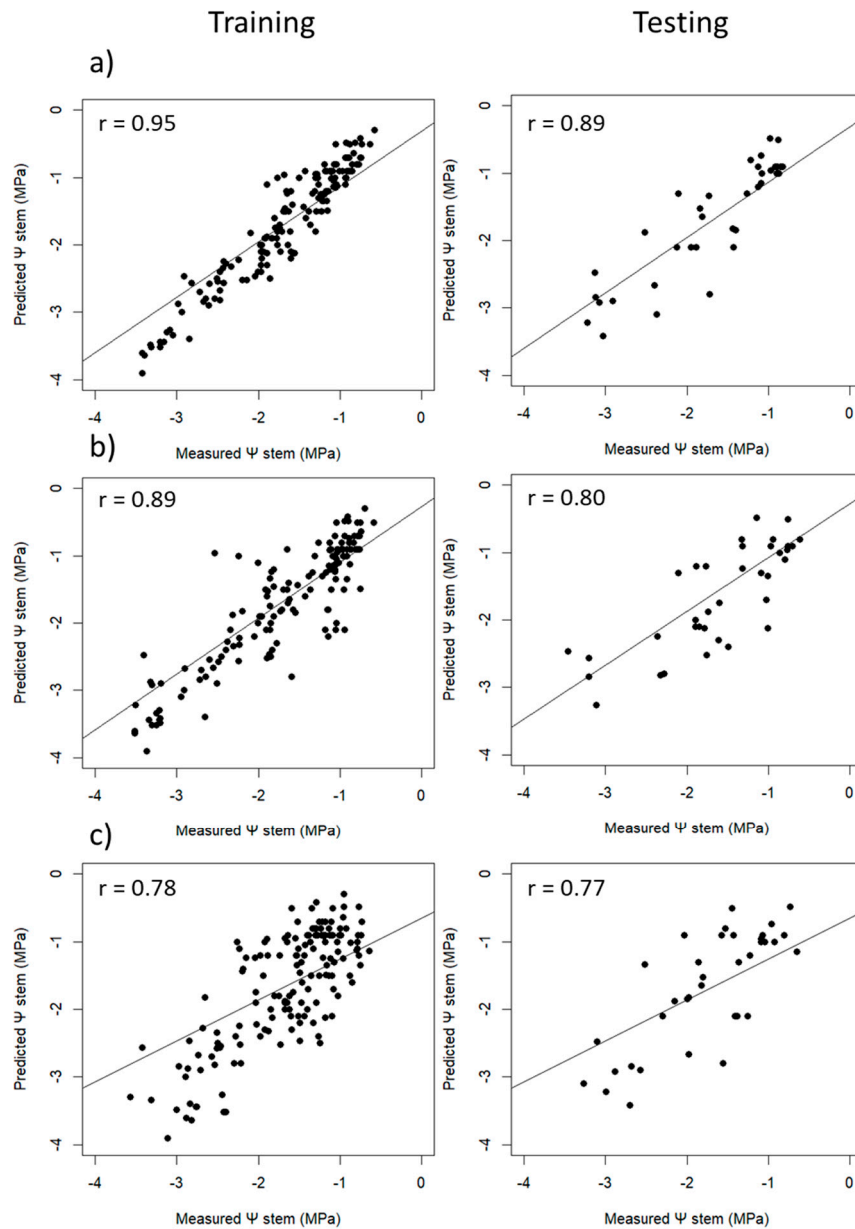


Figure S1: Pearson's correlation between measured and predicted Ψ_{stem} using the random forest-based model (a), support vector machine (b) and linear model (c) with Planet spectral bands as predictors.

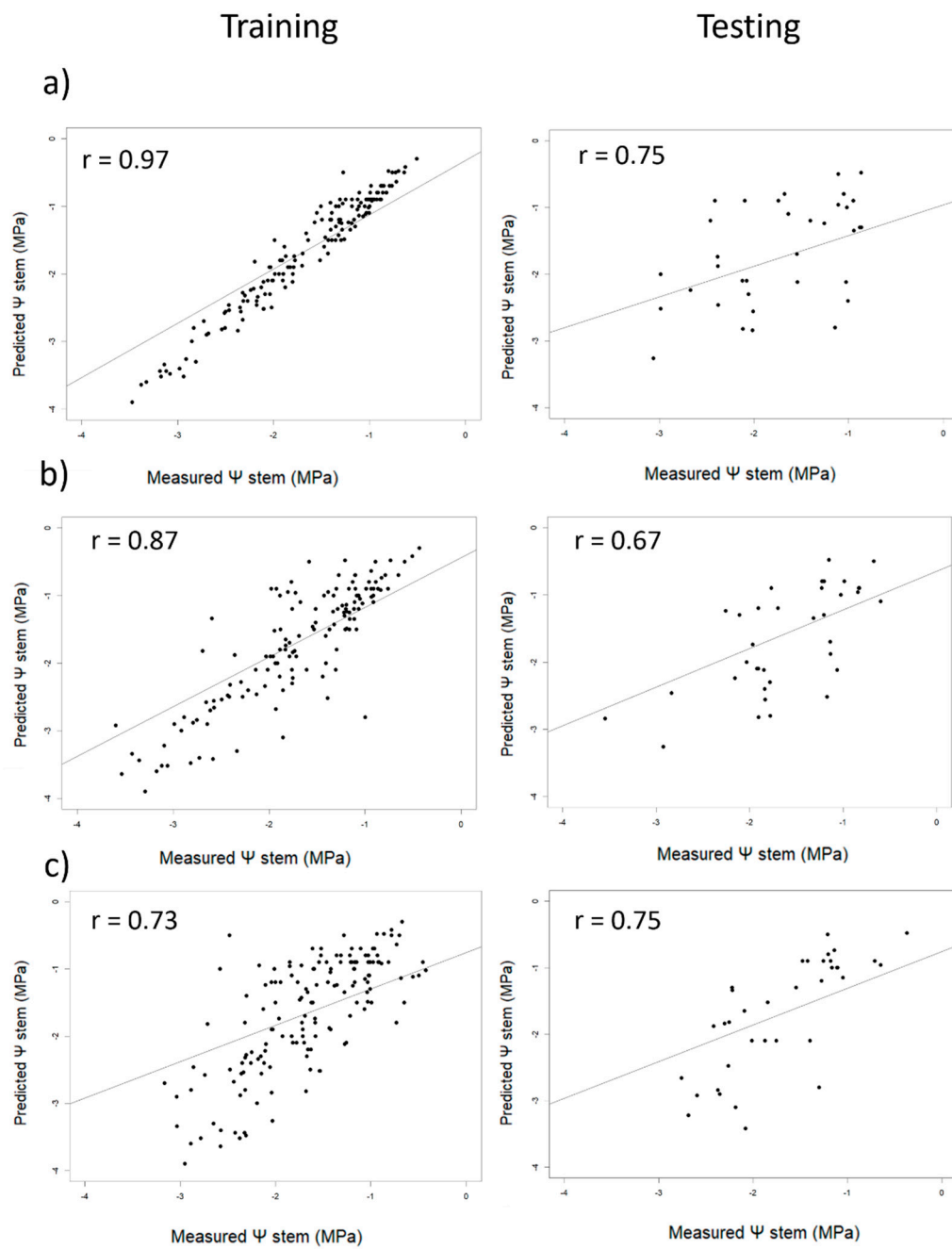


Figure S2: Pearson's correlation between measured and predicted Ψ_{stem} using the random forest-based model (a), support vector machine (b) and linear model (c) with vegetation indices as predictors.