SUPPLEMENTARY MATERIAL

Impact of climatic variables on carbon content in sugar beet root

Luis F. Sánchez-Sastre, Pablo Martín-Ramos, Luis M. Navas-Gracia, Salvador Hernández-Navarro and Jesús Martín-Gil

Results and discussion

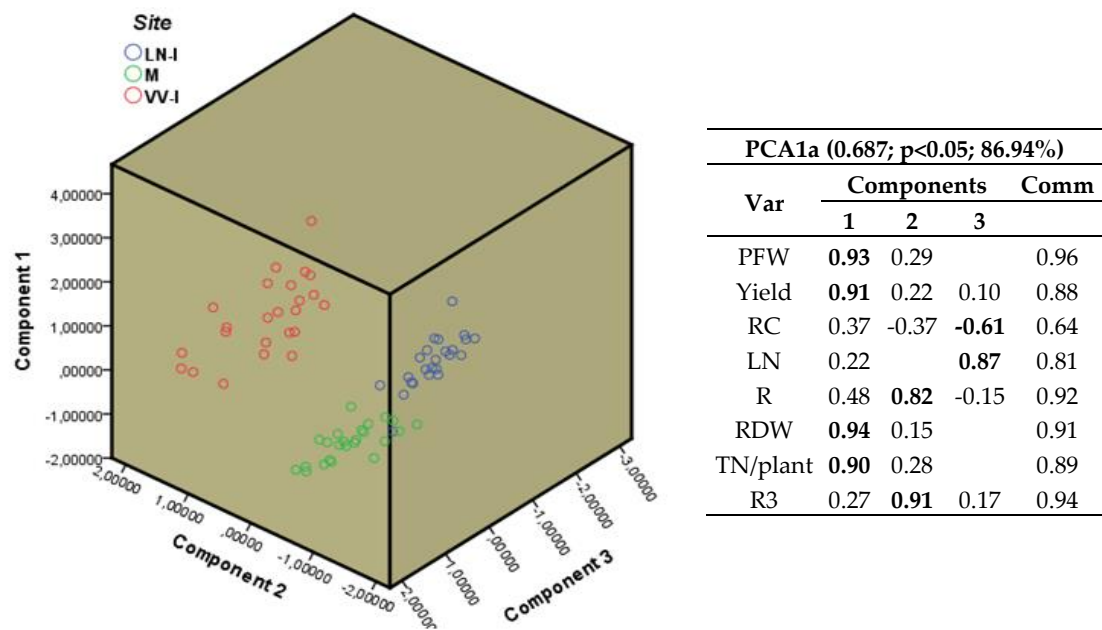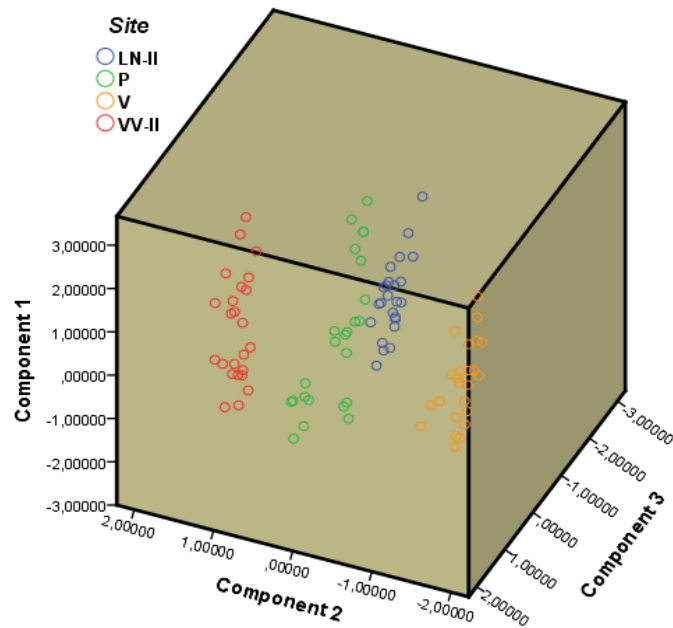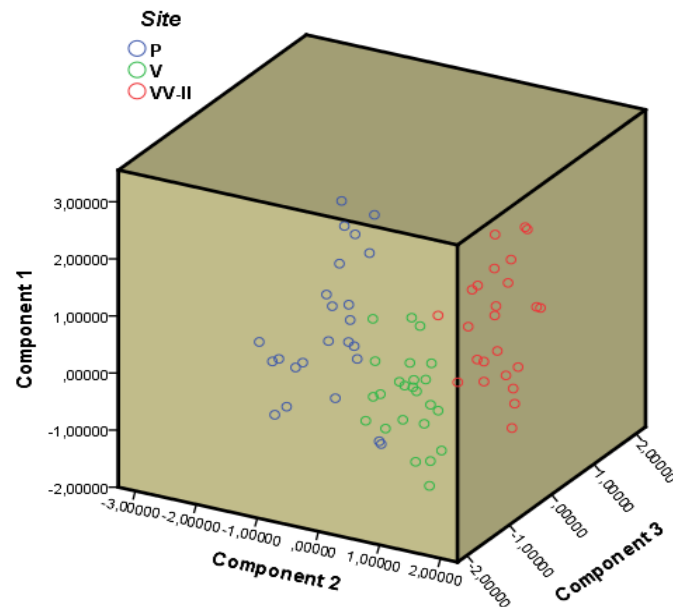| PCA1a (0.687; p<0.05; 86.94%)				
Var	Components			Comm
	1	2	3	
PFW	**0.93**	0.29		0.96
Yield	**0.91**	0.22	0.10	0.88
RC	0.37	-0.37	**-0.61**	0.64
LN	0.22		**0.87**	0.81
R	0.48	**0.82**	-0.15	0.92
RDW	**0.94**	0.15		0.91
TN/plant	**0.90**	0.28		0.89
R3	0.27	**0.91**	0.17	0.94

Figure S1. 3D plot (*left*) and summary table of the PCA analysis (*right*) for the first cultivation year (2011). The values in brackets in the first row of the table indicate the KMO index value, Barlett's sphericity test and the accumulated variance explained by the new variables, respectively. Empty cells indicate values lower than 0.10. Colors were defined by a two-step cluster analysis, in which the silhouette measure of cohesion and separation value was >0.5.

PCA2a (0.565; p<0.05; 87.37%)				
Var	Components			Comm
	1	2	3	
RFW	**0.99**			0.97
RDW	**0.98**			0.96
Yield	**0.9**			0.97
RC	0.21		**-0.50**	0.30
R6		**0.96**	0.21	0.97
T3	0.26	-0.11	**0.87**	0.84
RNplant	**0.86**	-0.12	-0.36	0.89
RCplant	**0.99**			0.98
R1		**0.96**	-0.23	0.99

PCA2b (0.535; p<0.05; 80.52%)				
Var	Components			Comm
	1	2	3	
PFW	**0.97**		0.11	0.96
RDW	**0.94**	0.24		0.94
Yield	**0.95**	0.22		0.95
RC	0.16	0.44	0.29	0.30
LN		**-0.74**	0.37	0.69
TN	**0.89**	-0.39		0.95
T3		**0.89**		0.81
R6			**0.92**	0.85

Figure S2. *Top:* 3D plot and summary table of PCA analysis for the second cultivation year (2012) for all the sites, excluding variables related to leaves. *Bottom*: 3D plot and summary table of PCA analysis for only three sites (Laguna de Negrillos was excluded) including all variables. The values in brackets in the first row of the tables indicate the KMO index value, Barlett's sphericity test and the accumulated variance explained by the new variables, respectively. Empty cells indicate values lower than 0.10. Colors were defined by a two-step cluster analysis, in which the silhouette measure of cohesion and separation value was >0.5 in both cases.