Supplementary information

Rhizobacterial species richness improves sorghum growth and soil nutrient synergism in a nutrient-poor greenhouse soil

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Supplementary figures

Figure S1

Impact of individual rhizobacterial species and their various combinations on seed germination. The statistical differences as indicated by letters were determined by ANOVA followed by Fisher's post hoc test.

Figure S2

Impact of individual rhizobacterial species and their various combinations on the shoot dry mass (a) number of root branches (b), root biomass per pot (c), shoot biomass per plant (d), root branches per plant (e) and root biomass per plant (f). The statistical differences as indicated by letters were determined by ANOVA followed by Fisher's post hoc test.

Figure S3

Relationship of the plant density with per plant shoot biomass (a), root biomass (b), and root branches (c) in the rhizobacterial treatments. The statistical analysis shows linear-regression followed by ANOVA describing the relationships between these parameters. While describing these relationships, we excluded the control treatments and presented them separately (Fig S4).

Figure S4

Relationship of the plant density with per plant (PP) shoot biomass (a), root biomass (b), and root branches (c) in the control treatments.

Figure S5

Impact of various rhizobacterial combinations on shoot (ace) and root (bdf) nutrient contents. The statistical differences as indicated by letters were determined by ANOVA followed by Fisher's post hoc test.

Figure S6

Relationship of the plant density with shoot (abc) and root (jkl) nutrient contents in the rhizobacterial treatments. The relationship of the per pot plant shoot (def) and root (mno) dry mass with nutrient contents in the rhizobacterial treatments. The relationship of per plant shoot (ghi) and root (pqr) dry mass with nutrient contents in rhizobacterial treatments. The statistical analysis shows linear-regression describing the relationships between these parameters. While describing these relationships, we excluded the control treatments and presented them separately (Fig. S7).

Figure S7

Relationship of the plant density with shoot (abc) and root (jkl) nutrient contents in the control treatments. The relationship of the per pot plant shoot (def) and root (mno) dry mass with nutrient contents in the control treatments. The relationship of per plant shoot (ghi) and root (pqr) dry mass with nutrient contents in the control treatments.

Figure S8

Impact of individual rhizobacterial species and their various combinations on soil nutrient contents. The statistical differences as indicated by letters were determined by ANOVA followed by Fisher's post hoc test.

Figure S9

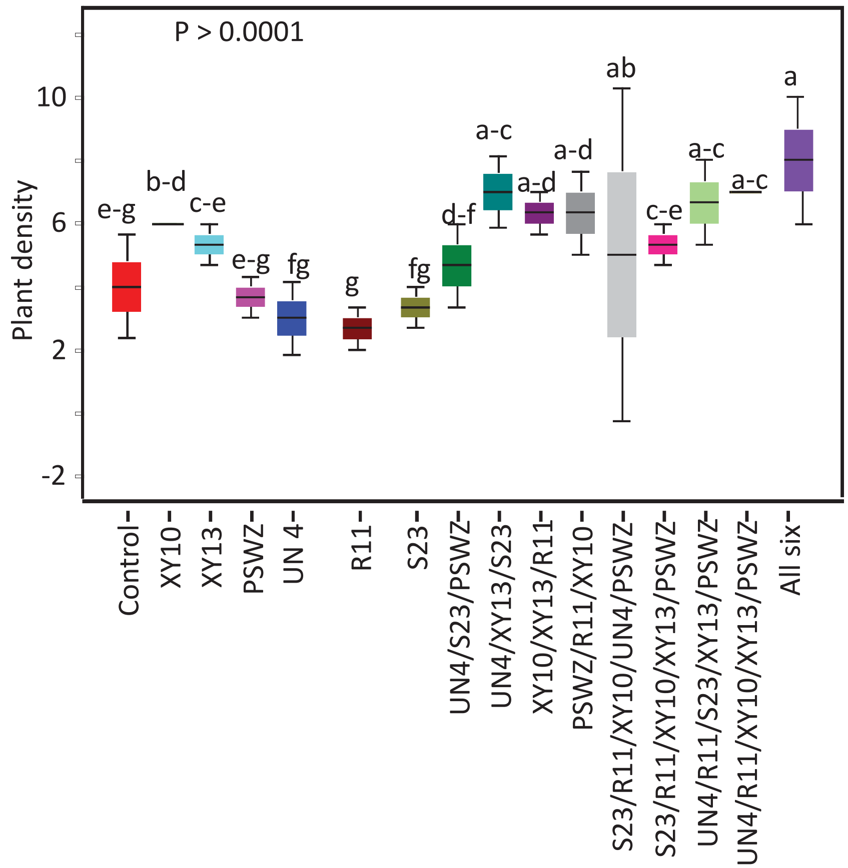
The relationship of plant density (a) and root branches (b) with soil Mn contents in the control treatment.

Figure S10

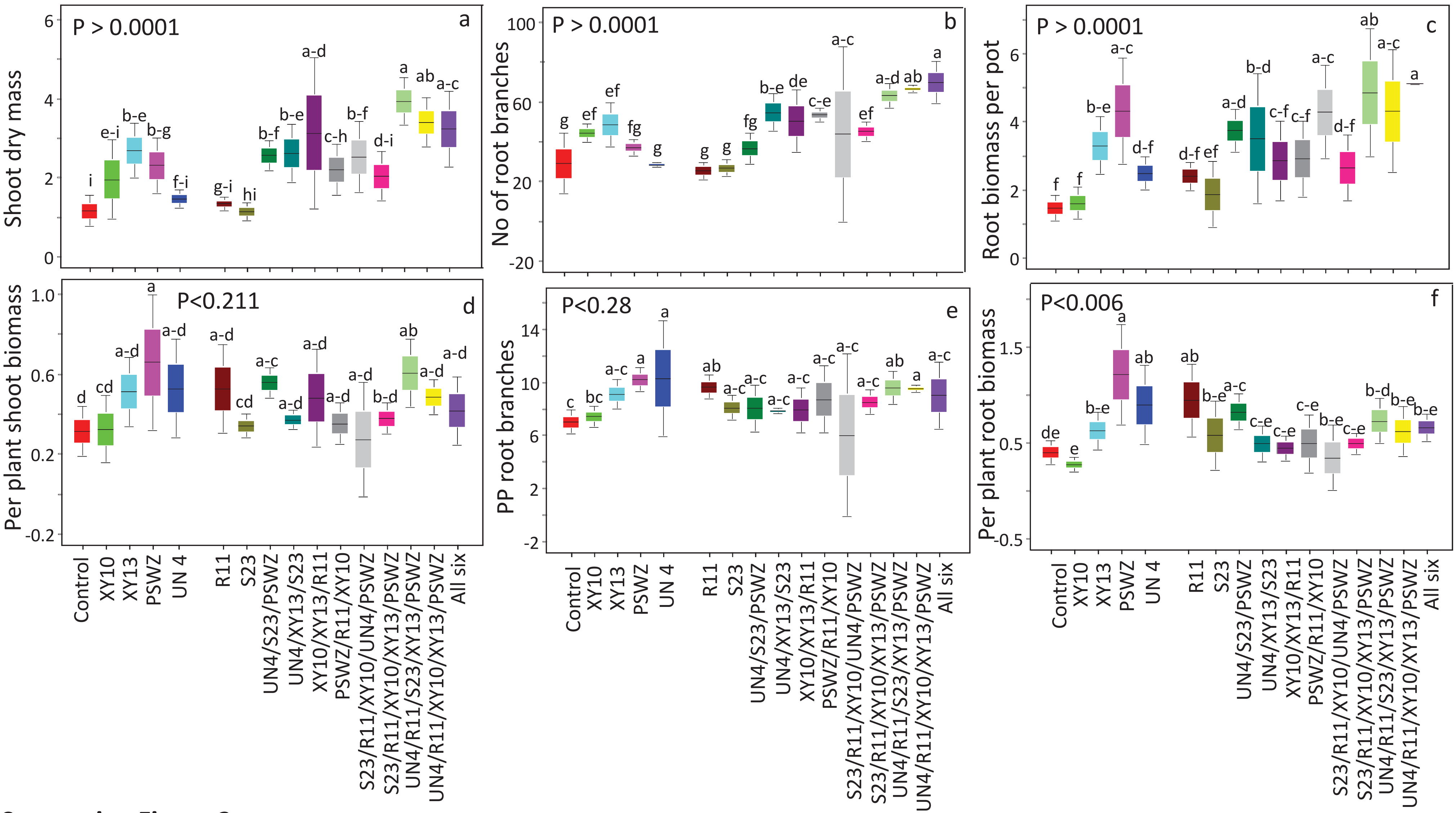
Relationships between various soil macro-and micro-nutrients in the control treatment.

Figure S11

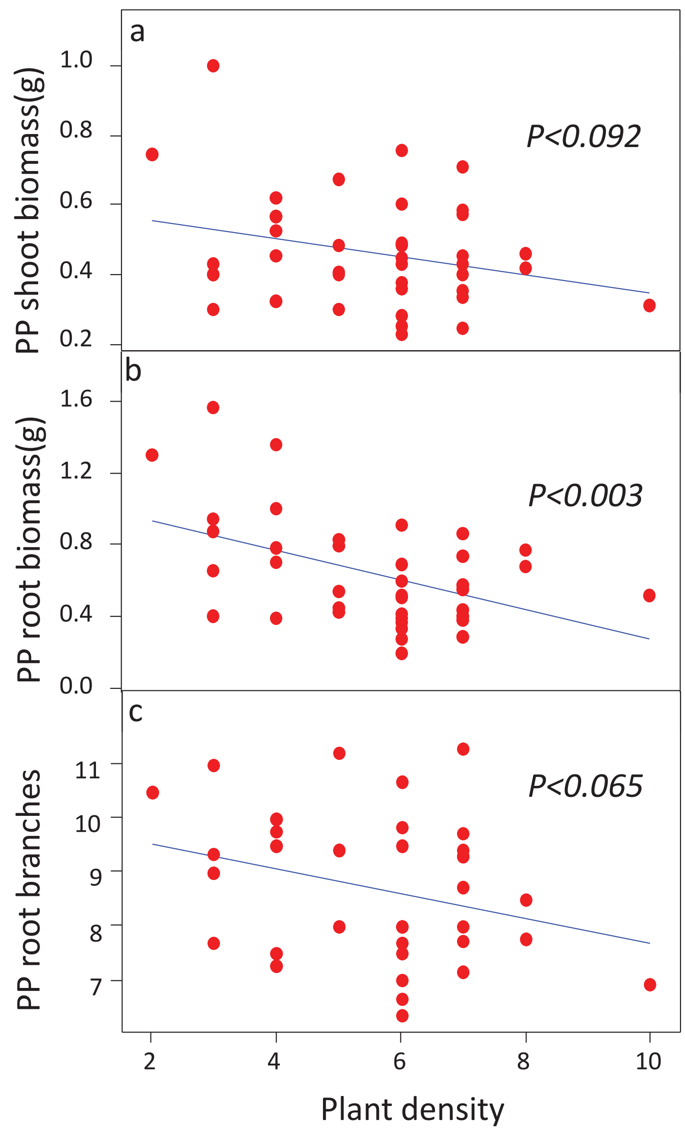
Relationships of some soil nutrients with plant tissue nutrients in the control treatment.



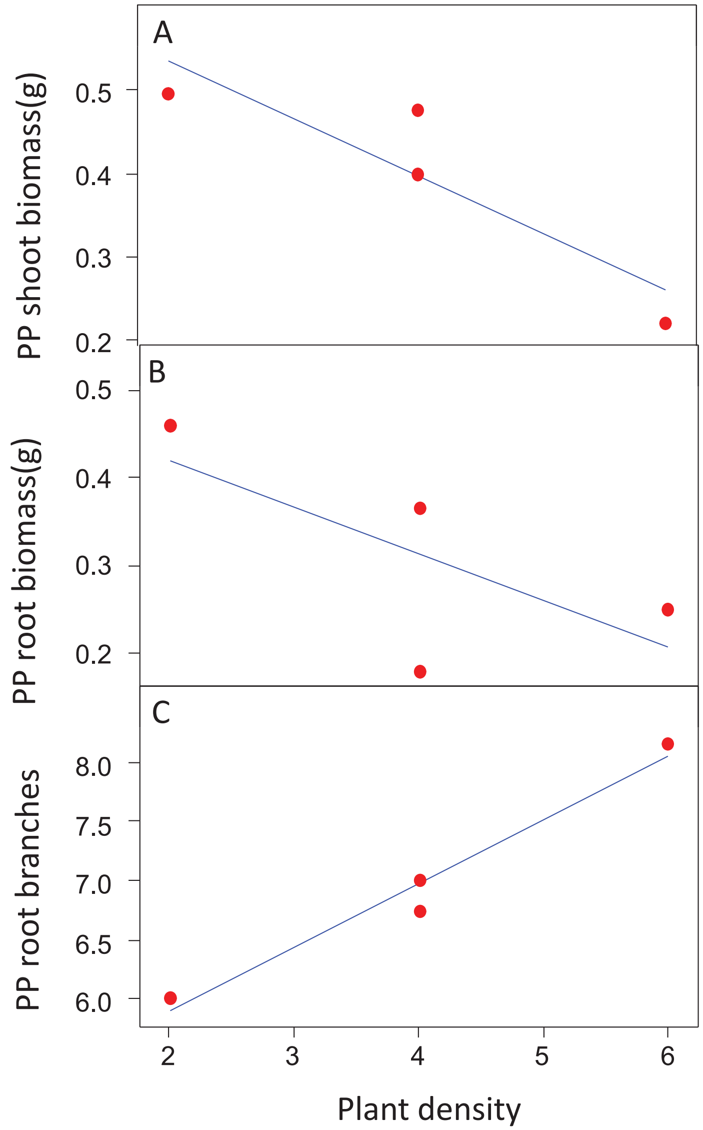
Supporting Figure 1



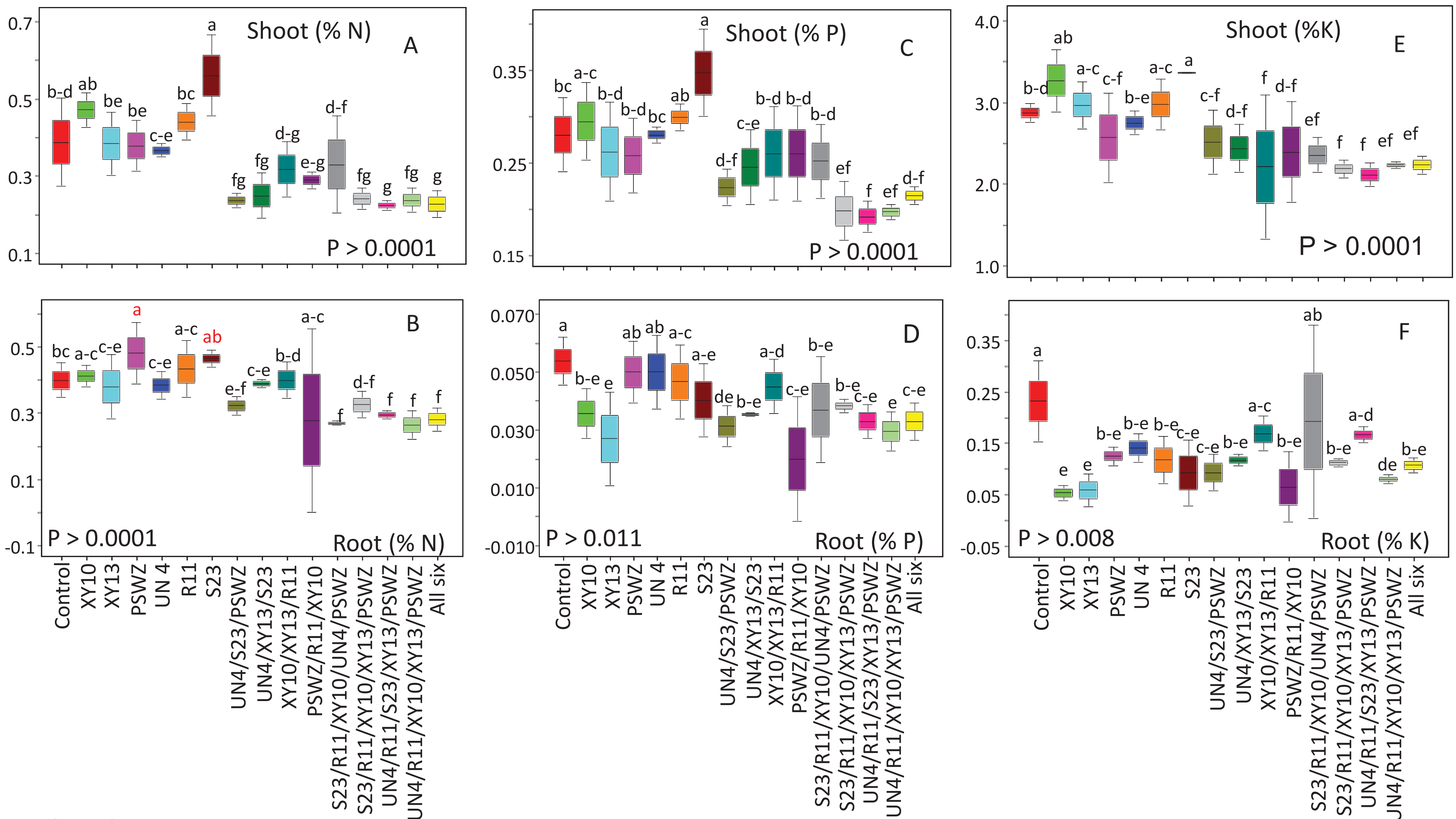
Supporting Figure 2



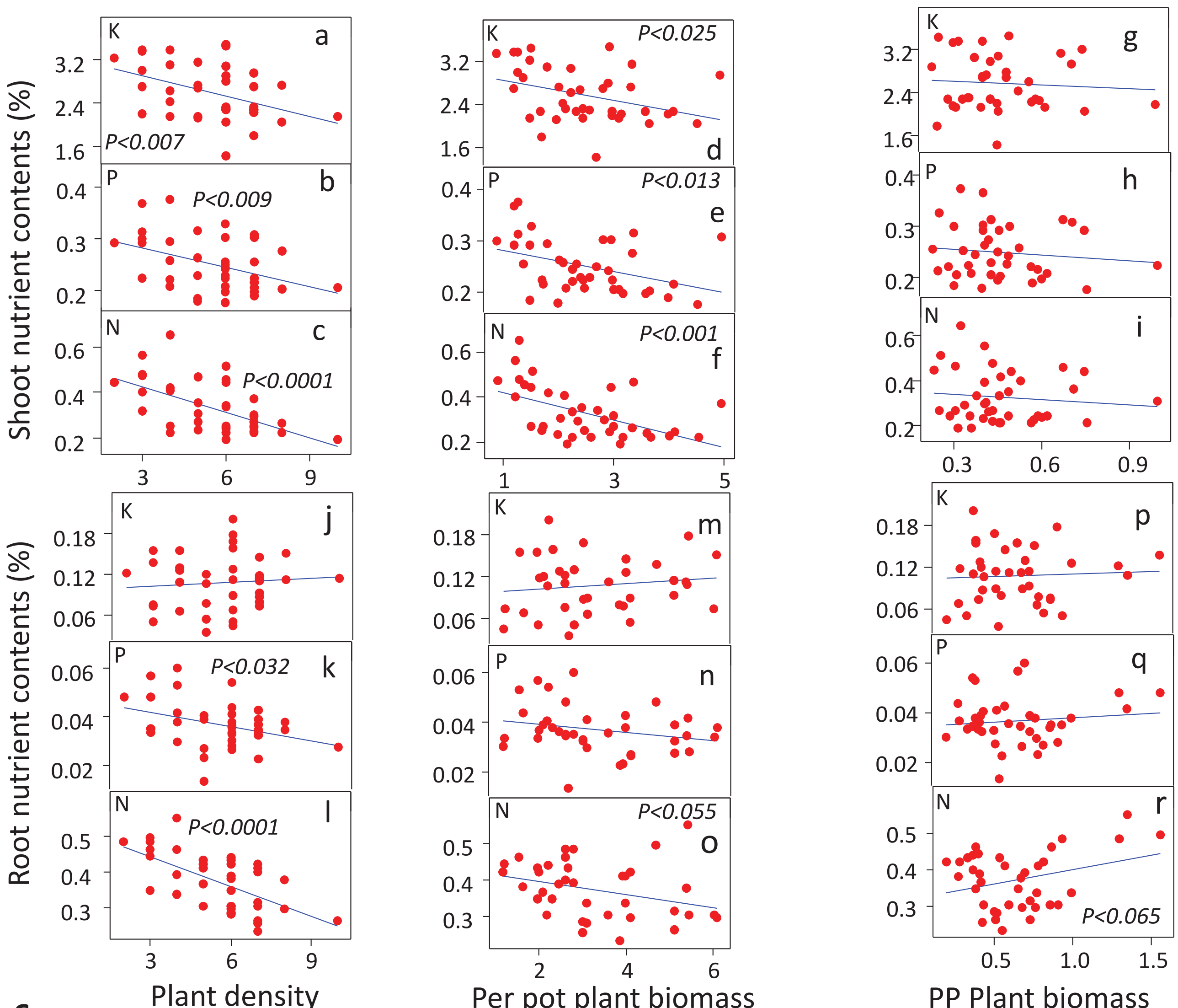
Supporting Figure 3



Supporting Figure 4



Supporting Figure 5



Supporting Figure 6

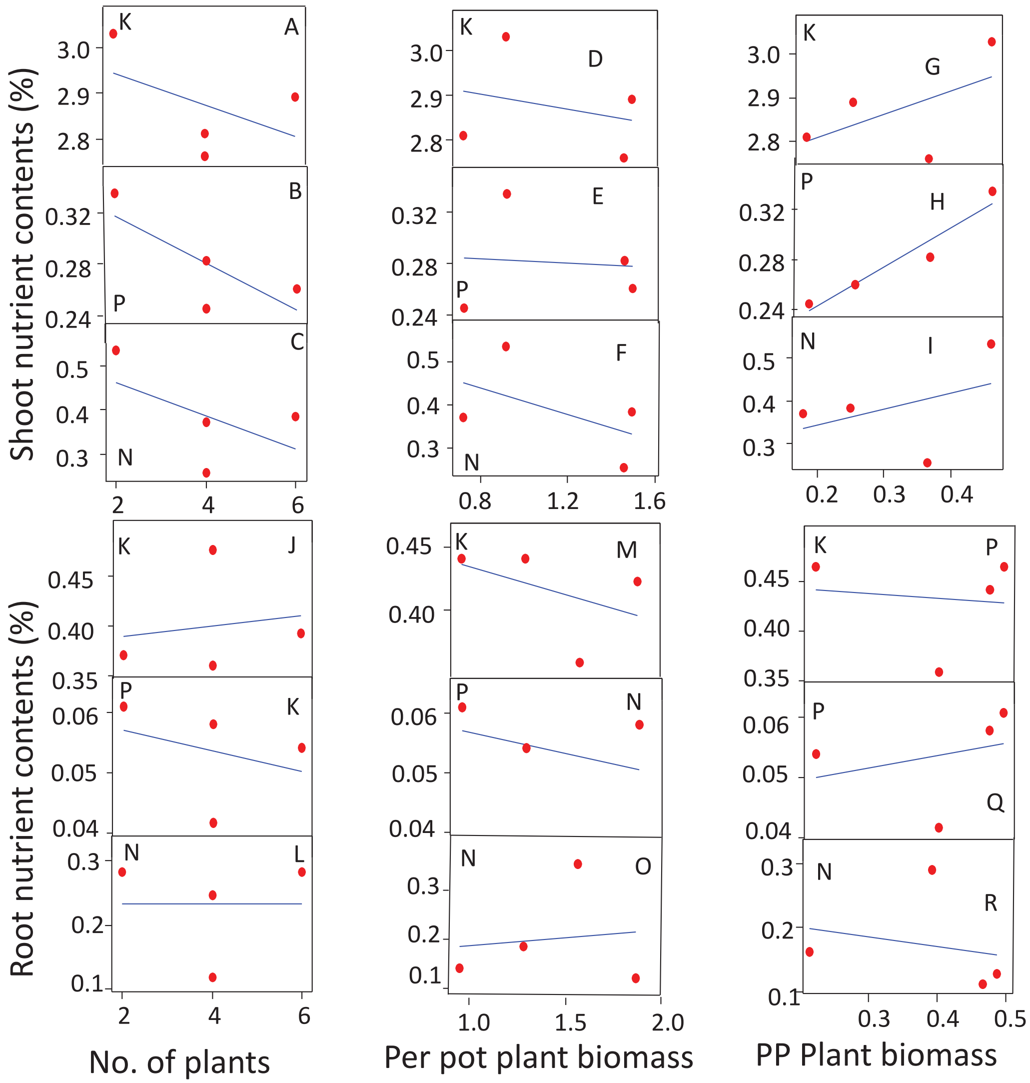
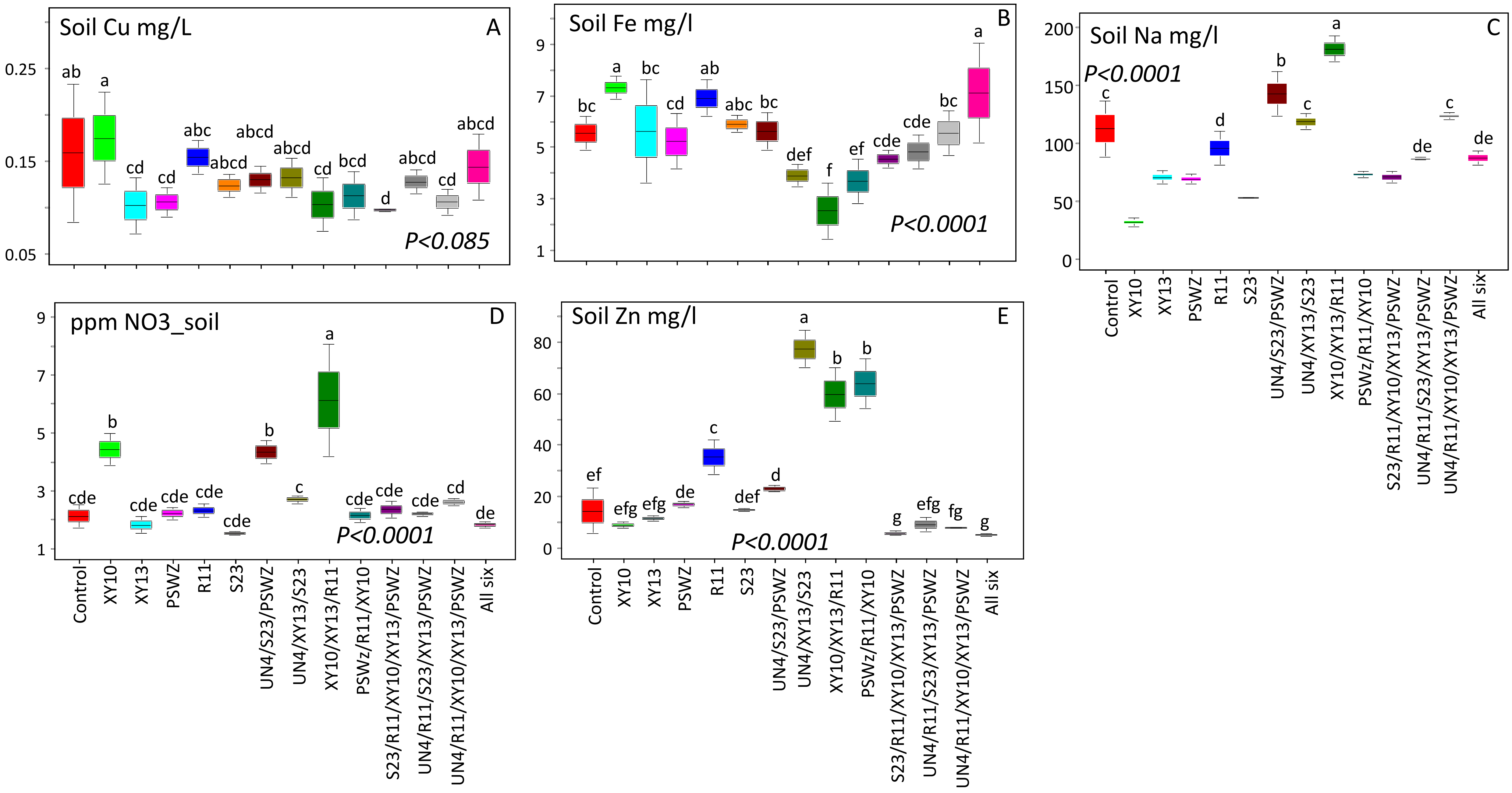
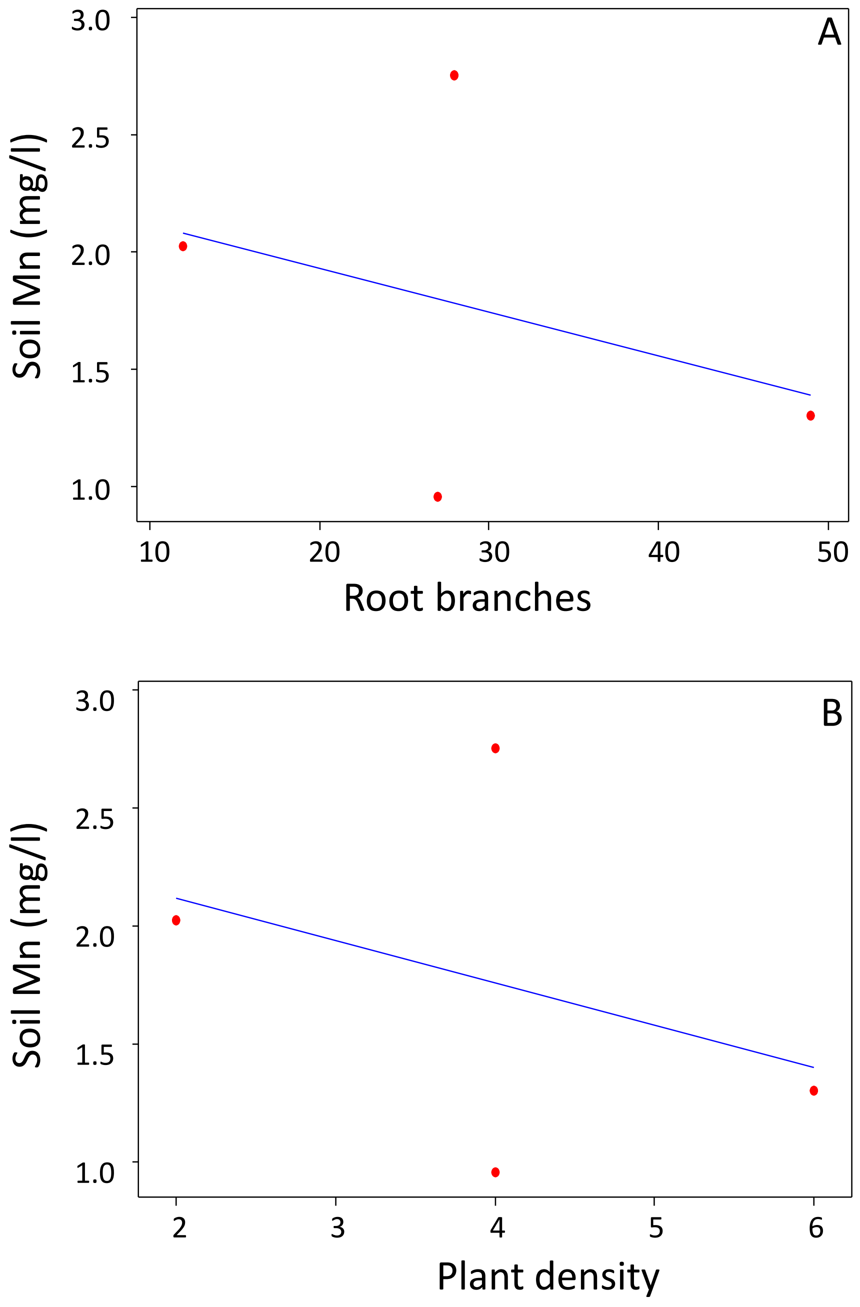

Shoot nutrient contents (%)
Root nutrient contents (%)
No. of plants
Per pot plant biomass
PP Plant biomass
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R

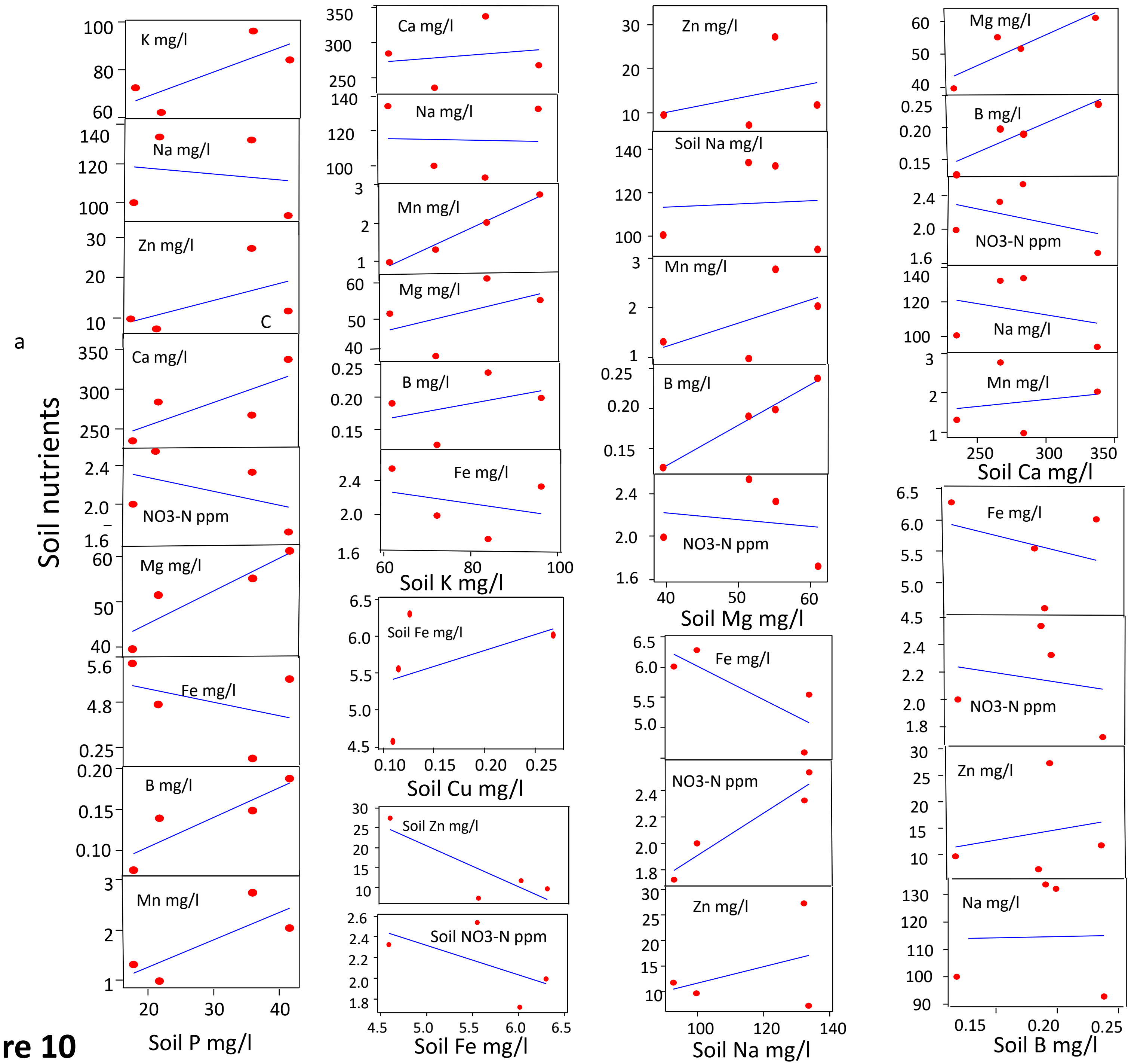
Figure S7



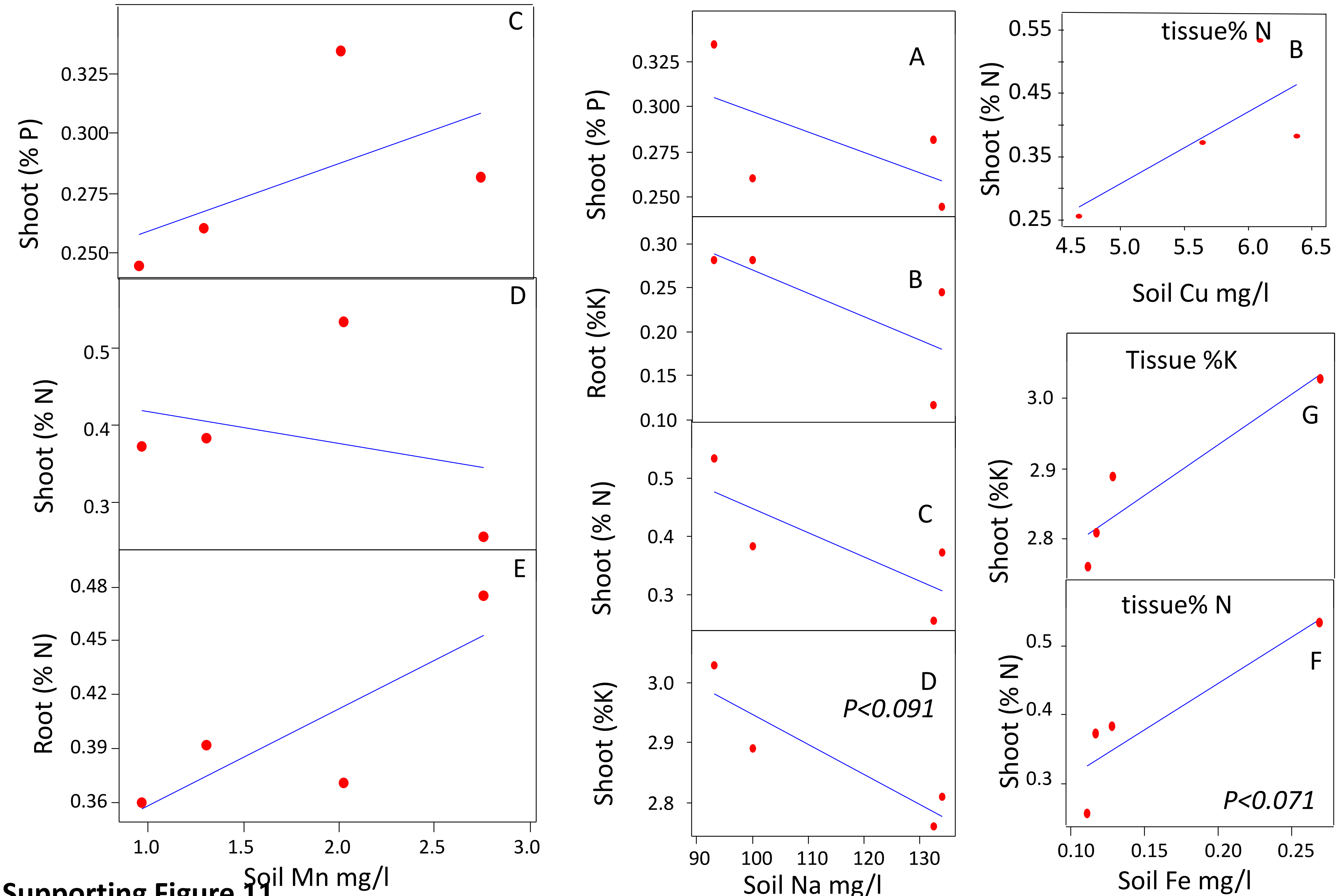
Supporting Figure 8



Supporting Figure 9



Supporting Figure 10



Supporting Figure 11