

Supplementary Information for

**Domestication-driven changes in plant traits associated with changes in
the assembly of the rhizosphere microbiota in tetraploid wheat**

Authors: Aymé Spor^{1*#}, Agathe Roucou^{2,3*}, Arnaud Mounier⁴, David Bru¹, Marie-Christine Breuil¹, Florian Fort⁵, Denis Vile², Pierre Roumet⁶, Laurent Philippot^{1#} and Cyrille Violle²

#Corresponding authors: A. Spor: ayme.spor@inrae.fr & L. Philippot: laurent.philippot@inrae.fr

This PDF file includes:

Figures S1 to S3
Tables S1

Supplementary Figure legends

Fig. S1. Impact of the rhizosphere environment on bacterial and fungal communities composition. Constrained analyses of principal coordinates of bacterial (a) and fungal (b) communities. Black and red dots correspond to bulk and rhizosphere samples, respectively. (c) mean (and s.e) OTU counts of bacterial and fungal classes enriched in the rhizosphere (blue bars) compared to bulk soil (red bars) (ANOVA, $p < 0.05$). (d) mean (and s.e) OTU counts of bacterial and fungal classes depleted in the rhizosphere (blue bars) compared to bulk soil (red bars) (ANOVA, $p < 0.05$).

Fig. S2. Impact of domestication on fungal communities composition. (a) Fungal OTUs displaying the type-1 (a) and the type-2 (b) patterns. Black, blue, white and red dots correspond to *dicoccoides*, *dicoccum*, *durum* elite varieties and *durum* landraces, respectively. Mean and standard errors are represented.

Fig. S3. (a) Bacterial cooccurrence network across the bulk soil samples. Edges indicate positive (green) or negative correlations (red) as defined by Spearmann's correlation $|\rho| > 0.6$. Node colors differ according to OTUs phylum assignment. (b) Venn diagram illustrating the number of nodes shared across the four domestication groups and the bulk soil bacterial cooccurrence networks.

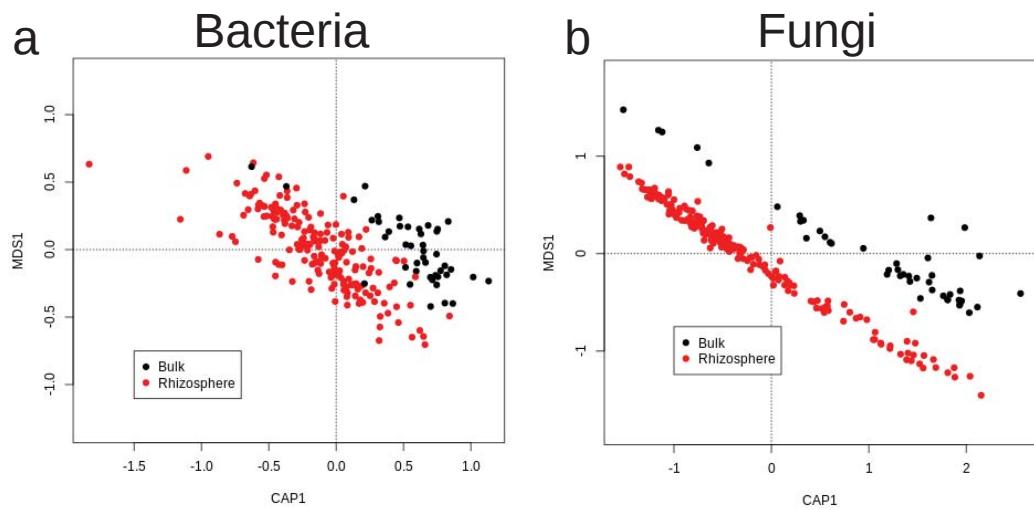
Table S1. List of the 40 tetraploid wheat accessions used in this study.

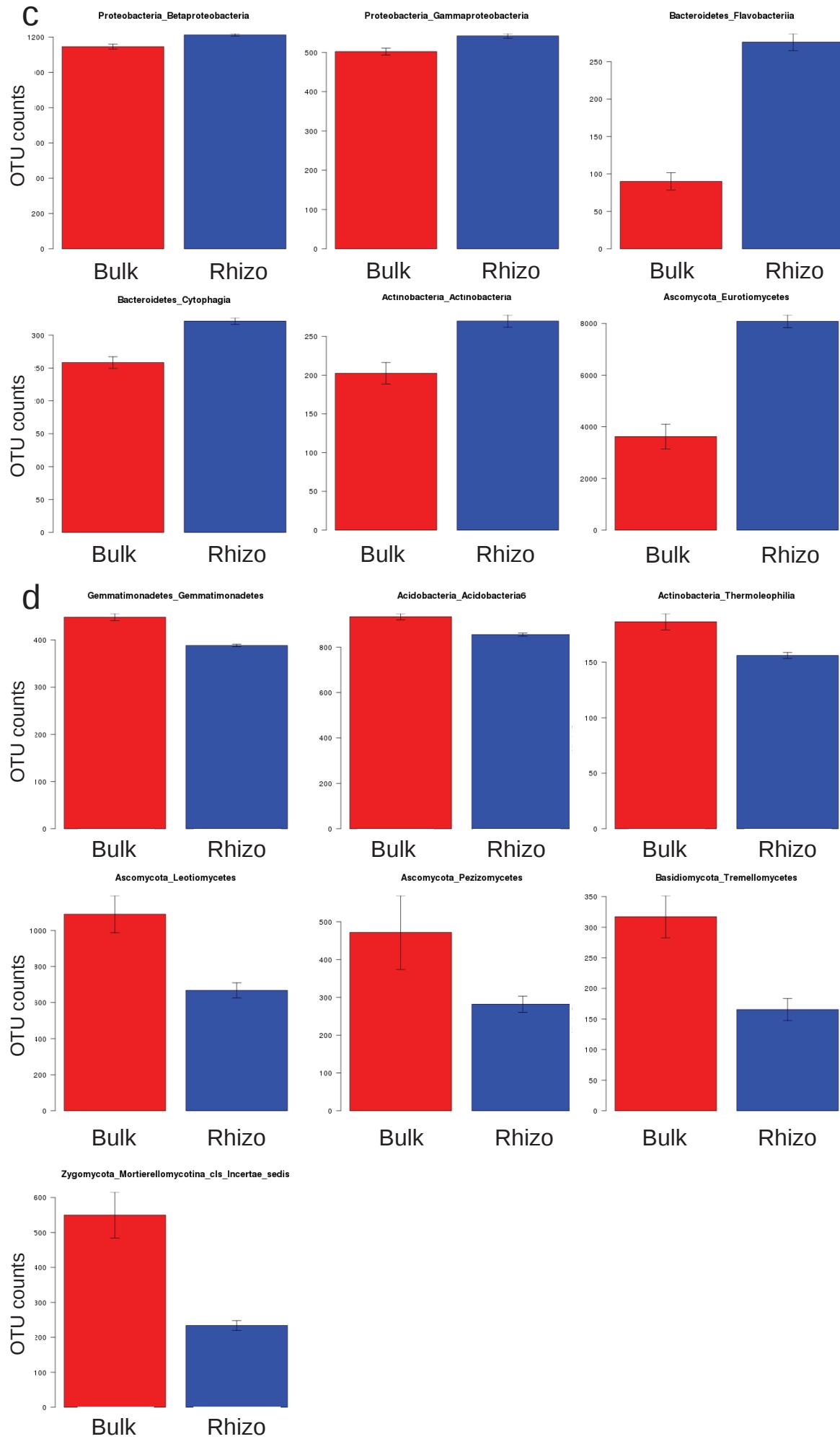
Sub-species	N	Collection
<i>T. turgidum</i> ssp. <i>dicoccoides</i> (ancestral form)	46499 46491 46323 46309 46310 46501 46453 46253 467014 352324	ICARDA ICARDA ICARDA ICARDA ICARDA ICARDA ICARDA ICARDA USDA USDA
<i>T. turgidum</i> ssp. <i>dicoccum</i> (first domesticated form)	45383 45351 45239 45354 45280 45441 352365 319868 cwi17084 415152	ICARDA ICARDA ICARDA ICARDA ICARDA ICARDA USDA USDA CIMMYT USDA
<i>T. turgidum</i> ssp. <i>durum</i> (Landrace) (durum wheat before Green Revoluton)	495 84866 97512 95920 82697 82702 82768 82715 82726 (maria)B6R	INRA Montpellier ICARDA ICARDA ICARDA ICARDA ICARDA ICARDA ICARDA 580
<i>T. turgidum</i> ssp. <i>durum</i> (Elite) (durum wheat after Green Revolution)	AGATHE BRUMAIRE DURGAMM NITA ROMEO PRIMADUR ARBOIS	GEVES GEVES GEVES GEVES GEVES GEVES GEVES

NEODUR	GEVES
IXOS	GEVES
DURENTAL	GEVES

ICARDA (International Center for Agricultural Research in the Dry Areas) Beirut, Lebanon.
USDA-ARS (US Department of Agriculture) National Small Grains, wheat collection, USA.
CIMMYT (International Maize and Wheat Improvement Center), Mexico
GEVES (French Group for the Study and Control of Varieties and Seeds), France
INRA (French National Institute of Agricultural Research) wheat collection, Montpellier

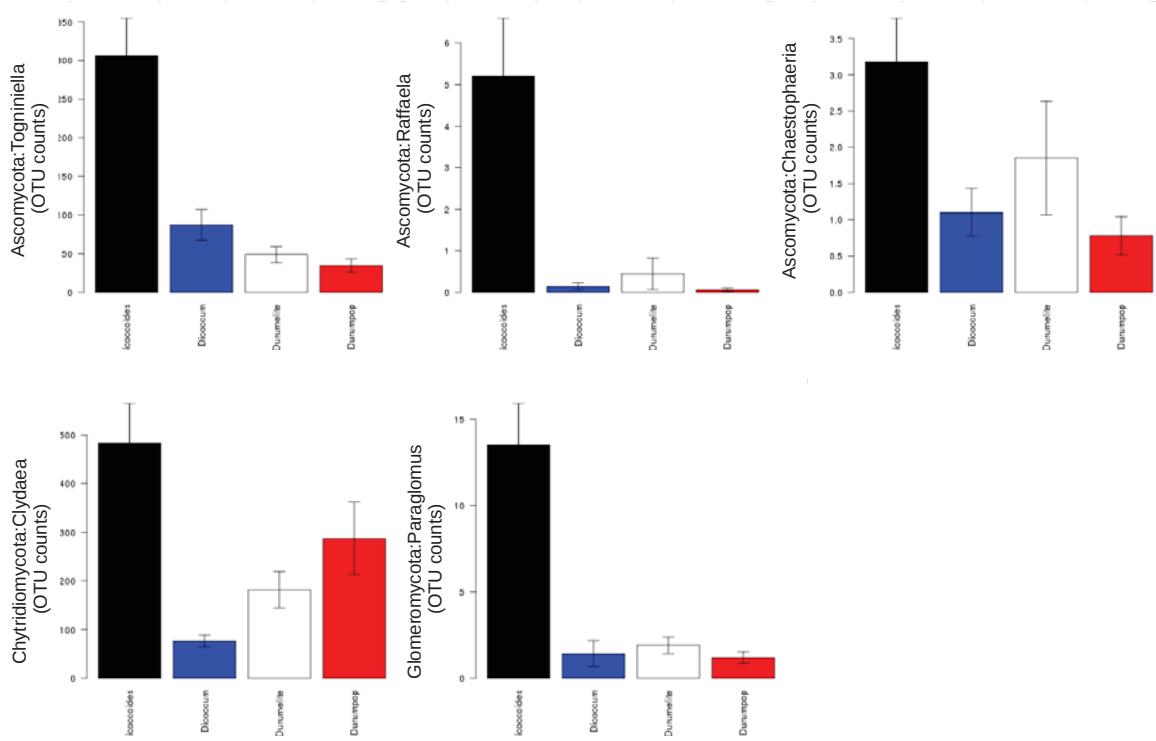
Supp figure 1.



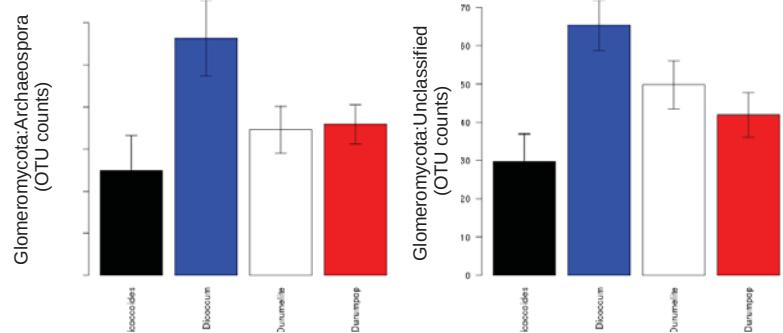


Supp figure 2.

a

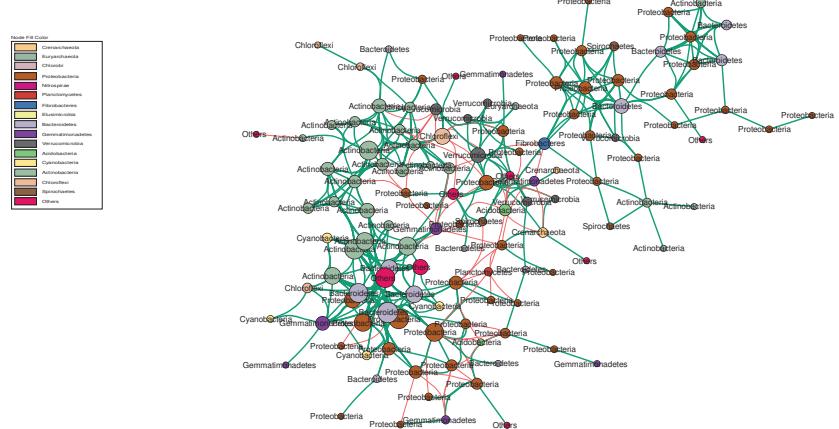


b



Supp figure 3.

a



b

