

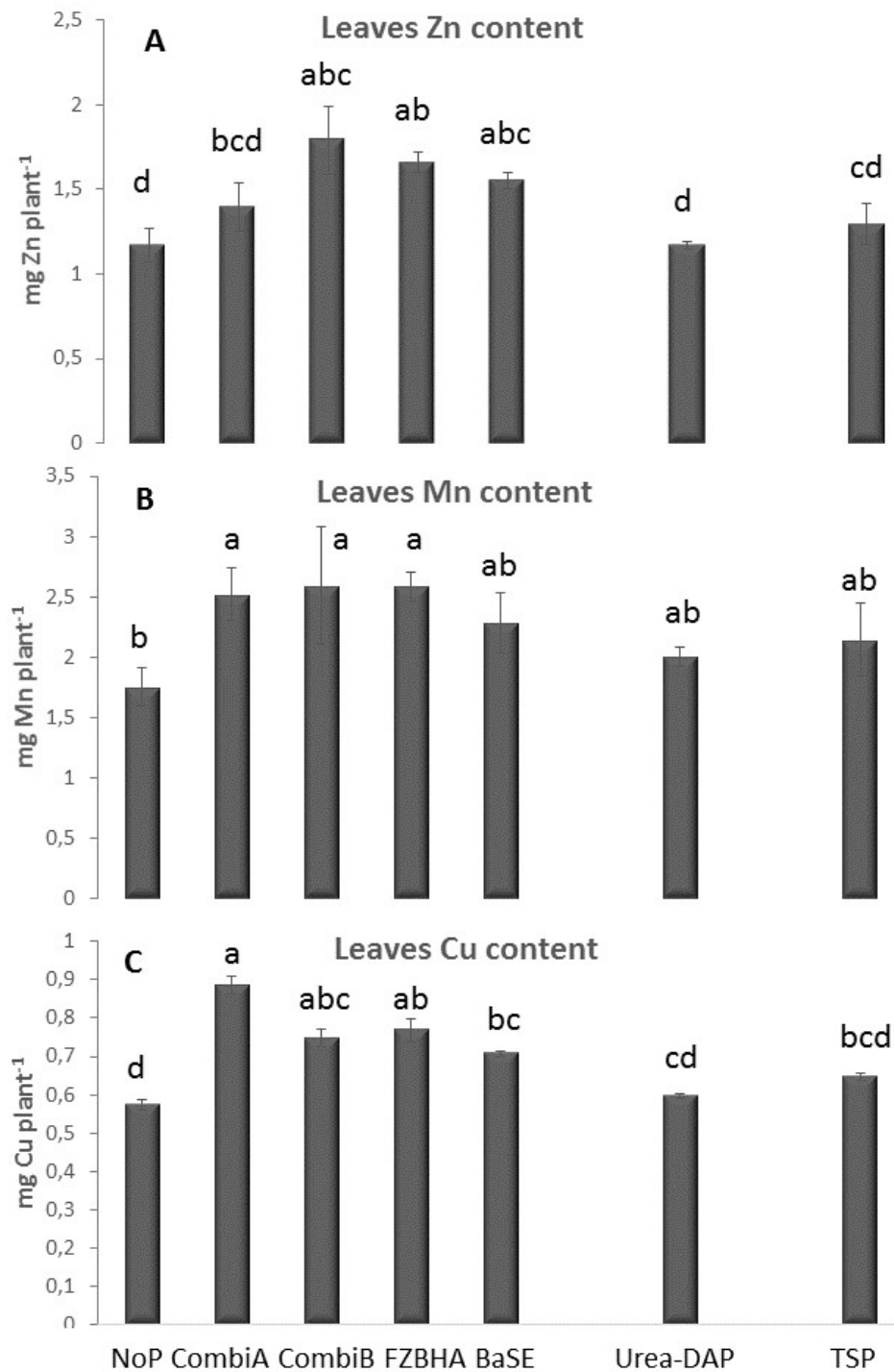
**Table 1.** Effects of nitrate (NO<sub>3</sub>) versus stabilized ammonium (Stab. NH<sub>4</sub>) fertilization on shoot growth and yield formation of different crops with and without inoculation with microbial biostimulants (BS).

Microbial Biostimulant (BS)	Soil/pH/P source	NO <sub>3</sub>	NO <sub>3</sub> +BS	Stab. NH <sub>4</sub>	Stab. NH <sub>4</sub> +BS	Crop, Culture system	Growth parameter	Reference
Proradix	pH 7.6 Rock-P (Exp.2, limed)	9.3 c	14.5 b	16.9 b	20.4 a	Maize	Shoot FW (g)	[1]
Proradix	Silty loam,	4.3 b	4.6 b	8.1 a	9.6 a	Maize (Pot)	Shoot DM (g)	[2]
FZB42	pH 7.0 Rock-P	1.8 c	2.0 bc	2.9 b	4.1 a	Maize (Pot)	Shoot DM (g)	[3]
Combi-B	(Exp.3)	2.0 b	3.2 b	4.1 ab	5.8 a	Maize (Pot)	Shoot DM (g)	[4]
Proradix	Clay-loam, pH 6.8, Rock-P		10.4 c	13.0 b	15.4 a	Maize (Pot)	Shoot DM	[1]
Proradix	Silty loam,	12.5 b	13.5 b	11.4 b	15.4 a	Wheat (Pot)	Grain DM	[1]
<i>P. mucilaginosus</i>	pH 6.4 Rock-P	12.5 b		11.4 b	15.1 a		Grain DM	[1]
FZB42	Silty sand, pH 5.6 Rock-P			7.3 b	10.0 a	Tomato (Pot)	Shoot DM	[5]
CRENEL	Silty loam, pH 5.7 starter P	2.1 b	2.3 b	2.6 b	3.4 a	Maize (Pot)	Shoot DM	[6]
CRENEL	95% Sand, pH 7.9 No P			300 b 17.2 b	640 a 35.8 a	Tomato (field)	Shoot FW Yield (t ha <sup>-1</sup> )	[7]

Proradix = *Pseudomonas* sp. DMSZ13134 (Sourcon Padena, Tübingen, Germany); FZB42 = *Bacillus amyloliquorfaciens* FZB42; *Paenibacillus mucilaginosus* (ABITEP, Berlin Germany), CRENEL = Microbial Consortia Product (Eurochem-Agro., Mannheim, Germany); Combi-B: FZB42-*Trichoderma harzianum* OMG16 combination with Zn and Mn (Institute of Bioanalytical Sciences, Bernburg, Germany).

## Reference

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**Figure S1.** Micronutrient shoot accumulation during early growth (42 DAS) of Maize (cv Limagrain 30.600) on an alkaline clay loam soil (Vertic Xerofluvent, pH 8.6) with and without (NoP) P fertilization in form of triple superphosphate (TSP) or di-ammonium phosphate (DAP). Nitrogen was supplied as DMPP-stabilized ammonium sulfate or non-stabilized Urea-DAP. In the PSM variants, phosphate fertilization was replaced by selected PSM products: Combifactor-A (CombiA), Combifactor-B (CombiB), *Bacillus amyloliquefaciens* FZB42 + humic acids (FZBHA), *B. amylolique-faciens* + seaweed extract (BaSE). Means of four replicates. Different letters indicate significant differences; One way ANOVA ( $p < 0.05$ ).