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Enhancing Organic Selenium Forms in Alfalfa Forage through Inorganic Selenium Foliar Application: Insights from Laboratory and Field Studies Using X-ray Spectroscopy.

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Supplementary Table S5. Concentrations of micronutrient (B, Mn, Fe, Ni, Zn, Mo) and macronutrient (Mg, P, K, Ca, S) in the aerial parts of alfalfa plants grown under different Se treatments in controlled conditions.

			Micronutrients (ppm)						
			B	**Mn**	**Fe**	**Ni**	**Zn**	**Cu**	**Mo**
CONTROL		**(-) BIO**	140.10 ± 31.34 b,c,d,e	51.70 ± 18.60 a	117.06 ± 20.29 a,b,c	2.08 ± 0.15 a,b	17.99 ± 0.27 a,b	2.36 ± 0.02 a,b,c	7.39 ± 1.23 b,c
		(+) BIO	142.40 ± 27.44 b,c,d,e	53.90 ± 18.68 a,b	97.09 ± 28.55 a,b,c	1.84 ± 0.47 a	15.77 ± 4.87 a,b	1.67 ± 0.17 a	3.78 ± 1.24 a
Se(VI)	**45 g ha^{-1}**	**(-) BIO**	193.58 ± 41.16 e	62.22 ± 15.79 a,b	121.27 ± 14.56 a,b,c,d	2.24 ± 0.27 a,b,c	19.02 ± 2.13 a,b	2.66 ± 0.35 b,c	7.63 ± 1.96 b,c
		(+) BIO	154.23 ± 36.29 c,d,e	51.29 ± 28.65 a	77.21 ± 12.24 a	1.46 ± 0.59 a	16.98 ± 7.09 a,b	1.83 ± 0.52 a	7.80 ± 4.13 c
	90 g ha^{-1}	**(-) BIO**	176.12 ± 14.95 d,e	65.62 ± 8.39 a,b	138.61 ± 36.96 b,c,d	2.18 ± 0.29 a,b	17.77 ± 1.68 a,b	2.04 ± 0.46 a,b	5.43 ± 1.61 a,b,c
		(+) BIO	167.11 ± 49.04 d,e	53.33 ± 16.87 a,b	104.35 ± 21.60 a,b,c	1.92 ± 0.61 a,b	13.83 ± 3.58 a	1.71 ± 0.40 a	5.55 ± 0.68 a,b,c
Se(IV)	**45 g ha^{-1}**	**(-) BIO**	170.69 ± 59.95 d,e	54.66 ± 10.50 a,b	98.98 ± 5.15 a,b,c	1.65 ± 0.25 a	18.40 ± 6.52 a,b	2.30 ± 0.54 a,b,c	5.97 ± 1.01 a,b,c
		(+) BIO	147.40 ± 28.21 c,d,e	56.13 ± 5.59 a,b	138.84 ± 44.06 b,c,d	1.91 ± 0.25 a,b	14.50 ± 0.30 a,b	1.77 ± 0.22 a	6.05 ± 1.30 a,b,c
	90 g ha^{-1}	**(-) BIO**	76.24 ± 17.48 a	79.74 ± 13.72 b	172.29 ± 72.37 d	3.54 ± 0.64 d	20.85 ± 4.25 b	2.92 ± 0.93 c	6.45 ± 2.01 a,b,c
		(+) BIO	104.10 ± 42.21 a,b,c	52.13 ± 12.14 a,b	92.76 ± 25.19 a,b	1.75 ± 0.23 a	16.28 ± 5.91 a,b	1.85 ± 0.60 a	5.15 ± 1.40 a,b,c
Se(Mix)	**45 g ha^{-1}**	**(-) BIO**	133.29 ± 17.60 b,c,d	68.19 ± 17.62 a,b	111.76 ± 18.84 a,b,c	1.85 ± 0.07 a,b	18.93 ± 3.80 a,b	2.27 ± 0.20 a,b,c	7.54 ± 3.52 b,c
		(+) BIO	82.01 ± 6.30 a,b	66.88 ± 18.92 a,b	107.17 ± 24.06 a,b,c	1.95 ± 0.23 a,b	14.87 ± 4.03 a,b	1.84 ± 0.31 a	5.75 ± 0.99 a,b,c
	90 g ha^{-1}	**(-) BIO**	156.81 ± 19.10 c,d,e	78.12 ± 24.00 a,b	128.29 ± 16.15 a,b,c,d	2.93 ± 1.06 b,c,d	20.15 ± 2.98 a,b	2.61 ± 0.30 b,c	6.09 ± 1.71 a,b,c
		(+) BIO	123.08 ± 33.19 a,b,c,d	67.94 ± 9.31 a,b	147.71 ± 44.12 c,d	3.22 ± 1.35 c,d	16.77 ± 1.53 a,b	1.99 ± 0.20 a,b	4.38 ± 2.10 a,b

		Macronutrients (%)				
		Mg	**P**	**K**	**Ca**	**S**
CONTROL	**(-) BIO**	0.15 ± 0.01 a,b,c	0.13 ± 0.01 a,b	1.51 ± 0.16 a,b	1.21 ± 0.01 a,b	0.82 ± 0.10 a,b
	(+) BIO	0.15 ± 0.01 a,b,c	0.16 ± 0.01 b,c,d	2.23 ± 0.32 c,d	1.22 ± 0.04 a,b	0.73 ± 0.12 a,b
Se(VI)	**45 g ha^{-1}** **(-) BIO**	0.18 ± 0.03 b,c	0.14 ± 0.02 a,b,c	1.29 ± 0.38 a	1.28 ± 0.01 d,e	0.89 ± 0.13 a,b
	45 g ha^{-1} **(+) BIO**	0.17 ± 0.02 a,b,c	0.13 ± 0.01 a	1.75 ± 0.12 a,b,c,d	1.27 ± 0.02 c,d,e	0.80 ± 0.33 a,b
	90 g ha^{-1} **(-) BIO**	0.16 ± 0.03 a,b,c	0.15 ± 0.01 a,b,c	1.67 ± 0.12 a,b,c,d	1.21 ± 0.04 a,b	0.83 ± 0.15 a,b
	90 g ha^{-1} **(+) BIO**	0.17 ± 0.03 a,b,c	0.16 ± 0.03 a,b,c,d	2.27 ± 0.42 d	1.20 ± 0.02 a	0.84 ± 0.04 a,b
Se(IV)	**45 g ha^{-1}** **(-) BIO**	0.13 ± 0.06 a	0.15 ± 0.02 a,b,c	1.46 ± 0.44 a,b	1.27 ± 0.01 c,d,e	0.66 ± 0.10 a
	45 g ha^{-1} **(+) BIO**	0.19 ± 0.02 c	0.16 ± 0.01 c,d	2.01 ± 0.42 b,c,d	1.25 ± 0.01 b,c,d,e	0.93 ± 0.06 b
	90 g ha^{-1} **(-) BIO**	0.15 ± 0.00 a,b,c	0.18 ± 0.02 d	2.17 ± 0.45 c,d	1.29 ± 0.01 e	0.85 ± 0.16 a,b
	90 g ha^{-1} **(+) BIO**	0.16 ± 0.02 a,b,c	0.15 ± 0.01 a,b,c,d	1.92 ± 0.65 b,c,d	1.27 ± 0.01 c,d,e	0.91 ± 0.14 a,b
Se(Mix)	**45 g ha^{-1}** **(-) BIO**	0.14 ± 0.02 a,b,c	0.13 ± 0.01 a,b,c	1.63 ± 0.03 a,b,c	1.24 ± 0.01 b,c,d	0.87 ± 0.16 a,b
	45 g ha^{-1} **(+) BIO**	0.16 ± 0.03 a,b,c	0.14 ± 0.02 a,b,c	1.87 ± 0.27 a,b,c,d	1.21 ± 0.01 a,b	0.77 ± 0.27 a,b
	90 g ha^{-1} **(-) BIO**	0.15 ± 0.03 a,b,c	0.14 ± 0.01 a,b,c	1.49 ± 0.25 a,b	1.22 ± 0.03 a,b	0.93 ± 0.20 a,b
	90 g ha^{-1} **(+) BIO**	0.14 ± 0.02 a,b	0.15 ± 0.02 a,b,c	1.73 ± 0.44 a,b,c,d	1.23 ± 0.01 a,b,c	0.82 ± 0.10 a,b

Note. -BIO: without biostimulant, +BIO: with biostimulant (BIOFORGE® 600 mL ha^{-1}), Se(Mix): Se(VI)/Se(IV) (1:1). The results are expressed as the mean (n = 3) ± SE. Means not sharing any letter are significantly different by the LSD test at the $P < 0.05$ level of significance.