

**Table S1.** Nitrogen content in the faba bean seeds (g kg<sup>-1</sup>) as influenced by the examined factors during the study years 2013-2015.

Specification		2013	2014	2015	2013-2015
Average for factors					
Cultivars	Bobas	48.6a	51.6a	38.5a	46.2a
	Granit	47.6a	47.5b	37.1a	44.1a
Sowing density	45	47.8a	49.4a	37.8a	45.0a
	60	48.3a	49.5a	37.9a	45.2a
	75	48.3a	49.8a	37.8a	45.3a
Average for interaction					
Bobas	45	48.6a	51.8a	38.2a	46.2a
	60	49.0a	52.8a	38.7a	46.8a
	75	48.3a	50.1a	38.5a	45.6a
Granit	45	47.0a	46.9a	37.3a	43.7a
	60	47.5a	46.2a	37.1a	43.6a
	75	48.2a	49.4a	37.0a	44.9a
Average for years					
2013			48.1a		
2014			49.5a		
2015			37.8b		
Average		48.1	49.6	37.8	45.2

Different letters indicate a significant difference (Tukey's multiple range test).

**Table S2.** Nitrogen content in the faba bean straw (g kg<sup>-1</sup>) as influenced by the examined factors during the study years 2013-2015.

Specification		2013	2014	2015	2013-2015
Average for factors					
Cultivars	Bobas	9.4a	12.6b	5.6b	9.2a
	Granit	8.7a	13.6a	6.1a	9.5a
Sowing density	45	9.3a	13.1a	6.0a	9.5a
	60	8.7a	13.1a	5.7a	9.2a
	75	9.1a	13.1a	5.9a	9.4a
Average for interaction					
Bobas	45	9.4a	12.2a	5.6a	9.0a
	60	9.2a	12.9a	5.7a	9.3a
	75	9.5a	12.6a	5.5a	9.2a
Granit	45	9.2a	14.0a	6.4a	9.9a
	60	8.2a	13.3a	5.7a	9.1a
	75	8.7a	13.6a	6.2a	9.5a
Average for years					
2013			9.0b		
2014			13.1a		
2015			5.9c		
Average		9.1	13.1	5.9	9.4

Different letters indicate a significant difference (Tukey's multiple range test).

**Table S3.** Phosphorus content in the faba bean seeds (g kg<sup>-1</sup>) as influenced by the examined factors during the study years 2013-2015.

Specification		2013	2014	2015	2013-2015
Average for factors					
Cultivars	Bobas	5.57a	5.33a	3.33a	4.74a
	Granit	5.97a	5.33a	3.31a	4.87a
Sowing density	45	5.68a	5.35a	3.38a	4.80a
	60	5.68a	5.40a	3.30a	4.79a
	75	5.96a	5.25a	3.29a	4.83a
Average for interaction					
Bobas	45	5.44ab	5.30a	3.34a	4.69a
	60	5.12b	5.40a	3.30a	4.61a
	75	6.16ab	5.30a	3.34a	4.93a
Granit	45	5.92ab	5.40a	3.41a	4.91a
	60	6.24a	5.40a	3.29a	4.98a
	75	5.76ab	5.20a	3.24a	4.73a
Average for years					
2013			5.77a		
2014			5.33b		
2015			3.32c		
Average		5.77	5.33	3.32	4.81

Different letters indicate a significant difference (Tukey's multiple range test).

**Table S4.** Phosphorus content in the faba bean straw (g kg<sup>-1</sup>) as influenced by the examined factors during the study years 2013-2015.

Specification		2013	2014	2015	2013-2015
Average for factors					
Cultivars	Bobas	1.45a	1.63a	0.47a	1.18a
	Granit	1.46a	1.66a	0.48a	1.20a
Sowing density	45	1.49a	1.66a	0.50b	1.22a
	60	1.49a	1.62a	0.45a	1.18a
	75	1.38a	1.65a	0.50a	1.18a
Average for interaction					
Bobas	45	1.40a	1.55a	0.49a	1.15a
	60	1.52a	1.65a	0.45a	1.21a
	75	1.42a	1.68a	0.48a	1.19a
Granit	45	1.58a	1.77a	0.50a	1.28a
	60	1.46a	1.58a	0.44a	1.16a
	75	1.34a	1.62a	0.51a	1.16a
Average for years					
2013			1.45b		
2014			1.64a		
2015			0.48c		
Average		1.46	1.65	0.48	1.19

Different letters indicate a significant difference (Tukey's multiple range test).

**Table S5.** Potassium content in the faba bean seeds (g kg<sup>-1</sup>) as influenced by the examined factors during the study years 2013-2015.

Specification		2013	2014	2015	2013-2015
Average for factors					
Cultivars	Bobas	11.4a	10.7a	10.4a	10.8a
	Granit	11.7a	10.8a	10.4a	11.0a
Sowing density	45	11.7a	11.0a	10.4a	11.0a
	60	11.3a	10.7a	10.5a	10.8a
	75	11.7a	10.7a	10.3a	10.9a
Average for interaction					
Bobas	45	11.5a	10.7a	10.4a	10.9a
	60	11.0a	10.7a	10.3a	10.7a
	75	11.7a	10.7a	10.4a	10.9a
Granit	45	11.8a	11.2a	10.3a	11.1a
	60	11.5a	10.7a	10.7a	11.0a
	75	11.7a	10.6a	10.2a	10.8a
Average for years					
2013			11.5a		
2014			10.8b		
2015			10.4b		
Average		11.6	10.8	10.4	10.9

Different letters indicate a significant difference (Tukey's multiple range test).

**Table S6.** Potassium content in the faba bean straw (g kg<sup>-1</sup>) as influenced by the examined factors during the study years 2013-2015.

Specification		2013	2014	2015	2013-2015
Average for factors					
Cultivars	Bobas	18.2a	17.2a	22.6a	19.3a
	Granit	17.8a	15.4b	23.2a	18.8a
Sowing density	45	17.6a	16.3a	23.0a	19.0a
	60	18.0a	16.0a	22.8a	18.9a
	75	18.4a	16.7a	23.0a	19.3a
Average for interaction					
Bobas	45	17.6a	17.9a	22.4a	19.3a
	60	18.2a	16.3ab	22.4a	19.0a
	75	18.8a	17.4ab	23.0a	19.7a
Granit	45	17.5a	14.7b	23.6a	18.6a
	60	17.8a	15.7ab	23.2a	18.9a
	75	18.0a	15.9ab	22.9a	18.9a
Average for years					
2013			18.0b		
2014			16.3c		
2015			22.9a		
Average		18.0	16.3	22.9	19.1

Different letters indicate a significant difference (Tukey's multiple range test).

**Table S7.** Calcium content in the faba bean seeds ( $\text{g kg}^{-1}$ ) as influenced by the examined factors during the study years 2013-2015.

Specification		2013	2014	2015	2013-2015
Average for factors					
Cultivars	Bobas	1.27a	0.78a	1.32a	1.12a
	Granit	1.11b	0.78a	1.38a	1.09a
Sowing density	45	1.18a	0.84a	1.29a	1.10a
	60	1.24a	0.76ab	1.41a	1.14a
	75	1.15a	0.75c	1.36a	1.09a
Average for interaction					
Bobas	45	1.08ab	0.80ab	1.22a	1.08ab
	60	1.15a	0.76ab	1.39a	1.15a
	75	1.14a	0.79ab	1.35a	1.14a
Granit	45	1.12ab	0.88b	1.35a	1.12ab
	60	1.12ab	0.76ab	1.43a	1.12ab
	75	1.03b	0.70a	1.37a	1.03b
Average for years					
2013			1.19b		
2014			0.78c		
2015			1.35a		
Average		1.19	0.78	1.35	1.11

Different letters indicate a significant difference (Tukey's multiple range test).

**Table S8.** Calcium content in the faba bean straw ( $\text{g kg}^{-1}$ ) as influenced by the examined factors during the study years 2013-2015.

Specification		2013	2014	2015	2013-2015
Average for factors					
Cultivars	Bobas	7.80a	4.78a	11.47b	8.02a
	Granit	6.99b	4.54a	12.77a	8.10a
Sowing density	45	7.94a	4.56a	12.20a	8.23a
	60	7.00b	4.79a	12.15a	7.98a
	75	7.25ab	4.64a	12.00a	7.96a
Average for interaction					
Bobas	45	7.80ab	4.72a	11.60a	8.04a
	60	7.76ab	4.95a	11.30a	8.00a
	75	7.84a	4.68a	11.50a	8.01a
Granit	45	8.08a	4.40a	12.80a	8.43a
	60	6.24b	4.63a	13.00a	7.96a
	75	6.66ab	4.60a	12.50a	7.92a
Average for years					
2013				7.40b	
2014				4.66c	
2015				12.1a	
Average		7.40	4.66	12.12	8.06

Different letters indicate a significant difference (Tukey's multiple range test).

**Table S9.** Magnesium content in the faba bean seeds (g kg<sup>-1</sup>) as influenced by the examined factors during the study years 2013-2015.

Specification		2013	2014	2015	2013-2015
Average for factors					
Cultivars	Bobas	1.13a	1.17a	1.51a	1.27a
	Granit	1.07a	1.10a	1.46a	1.21b
Sowing density	45	1.13a	1.19a	1.50a	1.27a
	60	1.09a	1.13a	1.51a	1.24a
	75	1.10a	1.09a	1.46a	1.21a
Average for interaction					
Bobas	45	1.16a	1.17a	1.53a	1.29a
	60	1.13a	1.18a	1.51a	1.27ab
	75	1.1a	1.15a	1.49a	1.25ab
Granit	45	1.09a	1.21a	1.46a	1.25ab
	60	1.04a	1.07a	1.50a	1.20ab
	75	1.08a	1.03a	1.42a	1.18b
Average for years					
2013				1.10b	
2014				1.35b	
2015				1.49a	
Average		1.10	1.14	1.49	1.24

Different letters indicate a significant difference (Tukey's multiple range test).

**Table S10.** Magnesium content in the faba bean straw (g kg<sup>-1</sup>) as influenced by the examined factors during the study years 2013-2015.

Specification		2013	2014	2015	2013-2015
Average for factors					
Cultivars	Bobas	1.59a	2.82a	1.77a	2.06a
	Granit	1.29b	2.65a	1.76a	1.90b
Sowing density	45	1.50a	2.93a	1.75a	2.06a
	60	1.41a	2.75ab	1.77a	1.98ab
	75	1.41a	2.53b	1.78a	1.91b
Average for interaction					
Bobas	45	1.59a	2.96a	1.78a	2.11a
	60	1.63a	2.77ab	1.76a	2.05ab
	75	1.54ab	2.72ab	1.77a	2.01ab
Granit	45	1.40abc	2.89a	1.72a	2.00ab
	60	1.19c	2.73ab	1.78a	1.90bc
	75	1.28bc	2.34b	1.78a	1.80c
Average for years					
2013				1.44c	
2014				2.74a	
2015				1.77b	
Average		1.44	2.74	1.77	1.98

Different letters indicate a significant difference (Tukey's multiple range test).