

Technology trial: Onion - nitrogen fertilisation
Location: Jablje
Year: 2017

Previous crop: broccoli

Fertilizing: 20 t/ha stable manure, 28 kg/ha N, 80 kg/ha P₂O₅, 240 kg/ha K₂O

side dressing: N according to treatments in three rations

Growing in the open field; drip irrigation

Planting density: 30 cm x 10 cm, transplanting into three-row stripes; crop density 200,000 plants/ha

Sowing: 15.02.2017, transplanting: 05.04.2017, harvesting: 14.08.2017

Trial layout: split-plot in 5 repetitions, experimental plot 4.50 m²

VARIETY and N FERTILISATION	Dry matter content %	YIELD					
		Marketable*				Waste*	Total*
		t/ha					
0=without N side dressing 54=3-times side dressing with 54 kg N/ha 108=3-times side dressing with 108 kg N/ha		small < 50 g	medium 50-100 g	large >100 g	total	t/ha	t/ha
0 Ptujška rdeča	11,3	0,52 a	0,90 ab	28,57 a	29,99 a	1,04 a	31,03 c
0 Tera	13,6	0,33 a	0,88 ab	29,43 a	30,63 a	2,29 a	32,92 c
0 Belokranjka	11,4	0,22 a	1,50 ab	29,54 a	31,26 a	0,84 a	32,10 c
0 Tamara	8,9	0,07 a	0,85 ab	44,43 a	45,35 a	0,59 a	45,94 b
0 Talon	9,4	0,20 a	1,44 ab	41,96 a	43,60 a	0,84 a	44,44 b
54 Ptujška rdeča	10,5	0,37 a	0,83 b	27,89 a	29,09 a	1,60 a	30,69 c
54 Tera	14,0	0,23 a	0,54 b	28,22 a	29,00 a	1,86 a	30,85 c
54 Belokranjka	11,8	0,32 a	1,61 a	30,24 a	32,17 a	1,10 a	33,27 c
54 Tamara	9,3	0,01 a	0,77 b	45,90 a	46,68 a	1,76 a	48,43 b
54 Talon	9,8	0,09 a	0,34 b	47,36 a	47,79 a	1,18 a	48,97 b
108 Ptujška rdeča	12,5	0,25 a	0,97 ab	29,22 a	30,44 a	1,25 a	31,69 c
108 Tera	13,0	0,21 a	0,53 b	33,43 a	34,17 a	2,10 a	36,27 c
108 Belokranjka	11,4	0,07 a	0,54 b	33,61 a	34,21 a	0,86 a	35,07 c
108 Tamara	9,6	0,02 a	0,30 b	54,41 a	54,73 a	2,29 a	57,02 a
108 Talon	9,7	0,00 a	0,26 b	51,53 a	51,79 a	3,98 a	55,78 a
Mean	11,1	0,19	0,82	37,05	38,06	1,57	39,63
LSD _{Fisher} (0,05)	/	0,28	0,78	8,17	7,67	1,74	7,16
Fertilisation mean							
0	10,9	0,27 a	1,11 a	34,79 a	36,17 a	1,12 a	37,29 a
54	11,1	0,21 a	0,82 a	35,92 a	36,94 a	1,50 a	38,44 a
108	11,3	0,11 a	0,52 a	40,44 a	41,07 a	2,10 a	43,17 a
LSD _{Fisher} (0,05)	/	0,16	0,525	6,818	6,324	0,981	5,918
Variety mean							
Ptujška rdeča	11,4	0,38 a	0,90 ab	28,56 a	29,84 a	1,30 a	31,14 a
Tera	13,5	0,26 ab	0,65 a	30,36 a	31,27 a	2,08 a	33,35 a
Belokranjka	11,5	0,20 b	1,22 b	31,13 a	32,55 a	0,94 a	33,48 a
Tamara	9,3	0,03 c	0,64 a	48,25 b	48,92 b	1,55 a	50,47 b
Talon	9,6	0,10 bc	0,68 a	46,95 b	47,73 b	2,00 a	49,73 b
LSD _{Fisher} (0,05)	/	0,15	0,38	2,93	2,82	0,93	2,62

* statistically significant different values within certain yield categories are marked with different letters

Technology trial: Onion - nitrogen fertilisation
Location: Jablje
Year: 2017

Previous crop: rye

Fertilizing: 30 kg/ha N, 60 kg/ha P₂O₅, 120 kg/ha K₂O

side dressing: N according to treatments in three rations

Growing in the open field; sprinkler irrigation

Planting density: 30 cm x 10 cm, transplanting into four-row stripes; crop density 200,000 plants/ha

Sowing: 15.02.2017, transplanting: 12.04.2017, harvesting: 10.08.2017

Trial layout: split-plot in 5 repetitions, experimental plot 3.20 m²

VARIETY and N FERTILISATION	Dry matter content %	YIELD					
		Marketable*				Waste* t/ha	Total* t/ha
		t/ha					
0=without N side dressing 54=3-times side dressing with 54 kg N/ha 108=3-times side dressing with 108 kg N/ha		small < 50 g	medium 50-100 g	large >100 g	total		
0 Ptujška rdeča	15,1	1,04 a	1,01 a	25,73 a	27,78 a	0,19 c	27,97 a
0 Tera	15,4	0,36 a	1,40 a	25,27 a	27,02 a	5,29 a	32,31 a
0 Ivica rdeča	11,7	0,21 a	0,81 a	35,83 a	36,85 a	1,26 b	38,12 a
0 Belokranjka	13,1	0,20 a	1,39 a	29,08 a	30,67 a	1,61 b	32,28 a
0 Tamara	9,4	0,00 a	0,57 a	50,02 a	50,59 a	2,00 b	52,59 a
0 Talon	10,3	0,07 a	0,51 a	47,51 a	48,08 a	1,04 b	49,13 a
54 Ptujška rdeča	14,2	0,83 a	0,78 a	25,26 a	26,86 a	0,42 b	27,29 a
54 Tera	14,3	0,43 a	2,15 a	24,35 a	26,93 a	2,11 b	29,04 a
54 Ivica rdeča	12,6	0,60 a	1,89 a	28,05 a	30,54 a	1,52 b	32,06 a
54 Belokranjka	14,0	0,59 a	1,85 a	25,58 a	28,01 a	1,50 b	29,52 a
54 Tamara	9,5	0,00 a	0,63 a	46,41 a	47,04 a	1,47 b	48,51 a
54 Talon	10,3	0,03 a	0,49 a	50,27 a	50,78 a	1,12 b	51,90 a
108 Ptujška rdeča	13,9	1,01 a	1,67 a	22,11 a	24,78 a	0,32 b	25,11 a
108 Tera	14,0	1,03 a	2,22 a	21,16 a	24,41 a	1,86 b	26,28 a
108 Ivica rdeča	11,7	1,07 a	1,92 a	23,72 a	26,71 a	0,97 b	27,68 a
108 Ibelokranjka	12,9	0,76 a	1,79 a	23,91 a	26,46 a	0,98 b	27,44 a
108 Tamara	10,0	0,03 a	0,75 a	40,01 a	40,78 a	0,39 b	41,17 a
108 Talon	10,0	0,06 a	0,84 a	43,33 a	44,23 a	1,73 b	45,96 a
Mean	12,4	0,46	1,26	32,64	34,36	1,43	35,80
LSD _{Fisher} (0,05)	/	0,63	0,91	5,99	5,23	1,84	5,58
Fertilisation mean							
0	12,5	0,31 a	0,95 a	35,57 a	36,83 a	1,90 a	38,73 a
54	12,5	0,41 a	1,30 a	33,32 ab	35,03 a	1,36 a	36,39 a
108	12,1	0,66 a	1,53 a	29,04 b	31,23 b	1,04 a	32,27 b
LSD _{Fisher} (0,05)	/	0,29	0,57	3,98	3,39	1,26	3,94
Variety mean							
Ptujška rdeča	14,4	0,96 a	1,15 b	24,36 c	26,48 c	0,31 c	26,79 c
Tera	14,6	0,61 b	1,92 a	23,59 c	26,12 c	3,09 a	29,21 c
Ivica rdeča	12,0	0,63 ab	1,54 ab	29,20 b	31,37 b	1,25 b	32,62 b
Belokranjka	13,3	0,52 b	1,67 ab	26,19 c	28,38 c	1,36 b	29,75 c
Tamara	9,6	0,01 c	0,65 c	45,48 a	46,14 a	1,29 b	47,42 a
Talon	10,2	0,05 c	0,61 c	47,04 a	47,70 a	1,30 b	49,00 a
LSD _{Fisher} (0,05)	/	0,35	0,45	2,85	2,53	0,85	2,51

* statistically significant different values within certain yield categories are marked with different letters