

Table 3: Total tuber yield and yield components of potato as affected by tested treatments to control brown rot disease in 2013/14 and 2014/15 seasons.

Characters	Total tuber yield (Ton / fed)		Increase in total tuber yield (%)		Tuber grading (Ton / fed.)					
	2013/14	2014/15	2013/14	2014/15	Tuber weight > 60 mm		Tuber weight 30 : 60 mm		Tuber weight < 30 mm	
Treatments	2013/14	2014/15	2013/14	2014/15	2013/14	2014/15	2013/14	2014/15	2013/14	2014/15
1. Control	9.693 g	9.040 e	0.00	0.00	2.972 e	3.400 c	5.600 de	4.780 bc	1.120 a	0.860 a
2. Streptomycin	13.410 abc	12.920ab	38.35	42.92	5.900 ab	5.840 ab	6.908 bc	6.580 a	0.602 a	0.500 a
3. <i>Pleurotus columbinus</i> spent wheat straw	14.492 a	13.640a	49.51	50.88	6.340 a	6.480 a	7.692 a	6.793 a	0.460 a	0.400 a
4. Wheat straw	9.800 fg	9.000e	1.10	-0.44	3.860 de	4.240 bc	5.000 e	3.820 d	0.940 a	0.940 a
5. <i>Bacillus subtilis</i>	10.916 efg	9.720de	12.62	7.52	4.360 cd	4.960 abc	5.556 de	4.080 cd	1.000 a	0.680 a
6. <i>Bacillus polymyxa</i>	12.100 cde	11.920bc	24.83	31.86	4.988 a-d	5.200 ab	6.320 cd	6.100 a	0.792 a	0.620 a
7. <i>Pseudomonas fluorescens</i>	14.120 ab	13.260ab	45.67	46.68	6.040 a	5.920 ab	7.576 ab	6.860 a	0.592 a	0.480 a
8. Anethole	11.300 def	10.840cd	16.58	19.91	4.600 bcd	5.120 ab	5.740 de	4.920 b	0.960 a	0.800 a
9. Neem oil	12.920 abc	12.800ab	33.29	41.59	5.600 abc	5.720 ab	6.780 c	6.560 a	0.540 a	0.520 a
10. Mustard oil	12.800 bcd	12.040abc	32.05	33.19	5.600 abc	5.280 ab	6.540 c	6.180 a	0.660 a	0.580 a
11. Caraway oil	14.230 ab	13.400ab	46.81	48.23	6.200 a	6.220 a	6.630 c	6.705 a	1.400 a	0.475 a

Means followed by the same letter (s) within each column do not significantly differ using Duncan's Multiple Range Test at the level of 5%. All recorded data are means of three replicates.

Table 4: Tuber quality of potato as affected by tested treatments to control brown rot disease in 2013/14 and 2014/15 seasons.

Characters	Tuber dry matter (%)		Starch (%)		Specific gravity		Infected tubers (%)		Decrease in infected tubers (%)	
	2013/14	2014/15	2013/14	2014/15	2013/14	2014/15	2013/14	2014/15	2013/14	2014/15
1. Control	19.364 f	19.741 b	12.88 c	13.80 a	1.0713 c	1.0752 a	18.89 a	20.15 a	0.00	0.00
2. Streptomycin	21.665 bc	21.630 a	15.17 ab	14.70 a	1.0918 ab	1.0815 a	4.11 de	5.80 de	78.24	71.22
3. <i>Pleurotus columbinus</i> spent wheat straw	21.840 b	21.374 a	15.91 a	14.93 a	1.0989 a	1.0935 a	2.50 e	3.00 f	86.77	85.11
4. Wheat straw	20.171 e	19.821 b	13.50 bc	13.30 a	1.0800 abc	1.0813 a	8.90 b	9.92 b	52.89	50.77
5. <i>Bacillus subtilis</i>	19.382 f	19.801 b	13.64 bc	13.00 a	1.0788 bc	1.0740 a	7.56 b	8.00 c	59.98	60.30
6. <i>Bacillus polymyxa</i>	21.180 cd	21.283 a	14.80 abc	13.20 a	1.0894 abc	1.0723 a	6.33 bc	7.20 cd	66.49	64.27
7. <i>Pseudomonas fluorescens</i>	22.520 a	21.180 a	15.73 a	14.80 a	1.0992 a	1.0833 a	3.75 e	4.60 e	80.15	77.17
8. Anethole	20.833 d	19.878 b	13.66 bc	13.61 a	1.0790 bc	1.0732 a	7.45 b	7.90 c	60.56	60.79
9. Neem oil	21.800 bc	20.907 a	14.41 abc	14.82 a	1.0855 abc	1.0730 a	5.42 cd	6.00 d	71.31	70.22
10. Mustard oil	21.400 bcd	21.196 a	15.38 ab	15.00 a	1.0962 ab	1.0842 a	5.28 cd	5.92 d	72.05	70.62
11. Caraway oil	21.264 bcd	21.178 a	14.80 abc	14.70 a	1.0910 ab	1.0908 a	3.18 e	4.00 e	83.17	80.15

Means followed by the same letter (s) within each column do not significantly differ using Duncan's Multiple Range Test at the level of 5%.

Table 10: Vegetative growth and tuber weight of potato at 70 days after planting as affected by tested treatments to control brown rot disease in pots experiment.

Treatments	Plant height (cm)	Foliage F.W. / plant (g)	Foliage D.W. / plant (g)	Disease rating	Tubers wt./ plant (g)	Increase in tuber wt. (%)
1. Control	11.00 e	18.78 d	3.40 c	4.00 a	84.16 h	0.00
2. Streptomycin	17.00 b	31.71 ab	5.27 ab	0.00 c	114.45 d	35.99
3. <i>Pleurotus columbinus</i> spent wheat straw	19.33 a	34.55 a	5.48 a	0.67 c	128.93 a	53.20
4. Wheat straw	17.67 ab	30.18 bc	5.16 ab	2.00 b	111.24 e	32.18
5. <i>Bacillus subtilis</i>	11.33 de	28.74 bc	3.92 bc	2.33 b	97.66 g	16.04
6. <i>Bacillus polymyxa</i>	11.33 de	28.26 bc	4.15 abc	2.00 b	122.68 bc	45.47
7. <i>Pseudomonas fluorescens</i>	12.00 de	29.47 bc	3.83 bc	0.00 c	98.52 g	17.06
8. Anethole	12.00 de	33.79 a	4.52 abc	0.00 c	105.37 f	25.20
9. Neem oil	15.00 c	26.64 c	4.43 abc	0.00 c	124.72 b	48.19
10. Mustard oil	14.00 cd	27.96 bc	3.40 c	0.00 c	97.91 g	16.34
11. Caraway oil	14.00 cd	29.38 bc	5.17 ab	0.00 c	121.52 c	34.39

Means followed by the same letter (s) within each column do not significantly differ using Duncan's Multiple Range Test at the level of 5%.