

Table 1 Soil characteristics and nutrient status of the two experimental locations in 2012

Experimental location	AEZ	Soil characteristics		Nutrient status				
		Land type	Soil type	pH	% OM	% N	P (ppm)	K (meq/100)
Jute Agriculture Experimental Station (JAES), Manikgonj, BJRI	Active Brahmaputra and Jamuna Flood Plain (AEZ-7)	Medium land	Sandy and Silty	6.69	1.79	0.35	14.38	0.138
Kishoregonj Regional Station (KRS), BJRI	Old Brahmaputra Flood Plain (AEZ-9)	Medium land	Loam	6.11	1.24	0.39	14.98	0.15

Table 2 Interaction effect among the different types of containers used for storing seed and seed treatments in O-9897on disease incidence, seed quality, seed yield, stick yield and fibre yield at JAES, BJRI

Interaction among containers and seed treatments	Percent disease incidence	Field emergence (%)	Plant stand/m ²	Plant height (M)	Base diameter (mm)	Fibre yield (gm/plant)	Stick yield (gm/Plant)	Fibre yield (t/ha)	Stick yield (t/ha)	Number of branch/plant	Number of pod/plant	Seed yield (gm/plant)	Seed yield (kg/ha)	1000- seed weight (gm)
T1 X D1	2.95 i	68.17 a	40.60 a	3.01	16.14 ab	13.33 c	26.33 e	5.46 abc	10.76 a	4.00 b	25.33 b	4.78 a	422.44 a	1.49 abc
T2 X D1	3.86 hi	64.33 ab	34.07 c	3.17	16.69 a	20.00 a	32.67 a	6.81 a	11.14 a	4.67 a	33.00 a	4.12 bcd	356.32 c	1.67 abc
T3 X D1	4.83 gh	66.67 a	29.400 g	3	16.51 ab	16.67 b	30.67 bc	4.95 bcd	9.08 b	4.00 b	25.67 b	4.15 bcd	324.00 defg	1.84 a
T4 X D1	5.81 fg	65.17 ab	28.47 h	3.11	15.81 abc	13.33 c	24.50 fgh	3.69 def	6.88 de	4.00 b	32.00 a	4.00 bcd	333.33 def	1.25 abc
T5 X D1	6.02 ef	61.17 bcd	37.33 b	3.1	16.39 ab	16.67 b	30.17 cd	6.21 ab	11.04 a	3.33 cd	24.67 b	4.56 ab	344.65 cde	1.56 abc
T6 X D1	4.14 h	59.67 cde	30.33 f	3.08	16.31 ab	20.00 a	32.00 ab	6.07 ab	9.67 b	3.33 cd	20.33 cde	4.50 ab	403.12 a	1.22 bc
T1 X D2	3.95 hi	68.17 a	26.60 l	2.83	16.05 ab	10.00 d	23.33 ghi	2.66 f	6.18 fgh	3.00 de	18.33 e	4.55 ab	378.56 b	1.45 abc
T2 X D2	4.03 h	62.33 bc	33.60 d	2.94	15.75 abc	10.00 d	21.67 jk	3.36 def	7.27 cd	4.00 b	27.00 b	4.30 ab	327.67 defg	1.75 ab
T3 X D2	9.03 c	66.67 a	27.53 j	2.94	15.76 abc	13.33 c	25.50 ef	3.59 def	6.91 de	4.00 b	21.33 cd	3.67 cd	356.23 bc	1.67 abc
T4 X D2	7.94 d	61.00 bcd	28.00 i	2.97	15.13 bc	10.00 d	21.83 ijk	3.17 ef	6.62 def	4.00 b	20.33 cde	4.50 ab	323.43 efg	1.25 abc
T5 X D2	6.52 ef	61.00 bcd	27.07 k	2.94	15.59 abc	13.33 c	25.33 ef	3.69 def	6.44 efg	3.33 cd	22.00 c	4.33 ab	335.66 cdef	1.55 abc
T6 X D2	6.64 ef	55.83 ef	26.60 l	3.02	15.51 abc	16.67 b	29.00 d	4.43 cde	7.85 c	3.00 de	20.00 cde	4.24 abc	342.46 cde	1.22 bc
T1 X D3	6.95 de	58.00 def	26.60 l	2.97	15.70 abc	10.00 d	24.83 efg	3.08 ef	5.58 hij	3.67 bc	20.00 cde	4.56 ab	348.75 cd	1.45 abc
T2 X D3	10.86 a	55.50 ef	23.33 m	2.87	15.34 abc	13.33 c	21.50 k	2.33 f	6.14 fgh	3.33 cd	24.67 b	4.00 bcd	314.34 fg	1.68 abc
T3 X D3	10.53 a	57.67 def	21.93 o	2.76	15.46 abc	10.00 d	23.17 hij	2.19 f	5.05 ij	3.67 de	19.00 de	3.67 cd	304.55 g	1.15 bc
T4 X D3	10.11 ab	54.50 f	31.73 e	2.85	15.06 bc	10.00 d	21.00 k	2.80 ef	4.95 j	3.00 de	17.67 e	3.60 d	313.65 fg	1.21 bc
T5 X D3	7.85 d	53.83 f	22.40 n	2.75	15.03 bc	10.00 d	21.00 k	3.08 ef	5.63 hi	3.00 de	18.00 e	3.66 cd	334.25 cdef	1.12 c
T6 X D3	9.14 bc	57.67 def	23.33 m	2.92	14.55 c	13.33 c	25.67 ef	2.66 f	5.91 gh	2.67 e	17.67 e	4.20 abcd	337.56 cdef	1.22 bc
Level of significance	0.05	0.05	0.05	NS	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	NS

T₁, Tin pot; T₂, Plastic pot; T₃, Poly bag; T₄, Gunny bag lined with polyethylene; T₅, Cloth bag; T₆, IRRI poly bag, D₁, Seed treated with BAU- Biofungicide (3%), D₂, Seed treated with Provac-200 (0.4%), D₃, Control (Untreated) Data in column having common letter(s) do not differ significantly at 5% level of significance; NS, Not significant.

Table 3 Interaction effect among the different types of containers used for storing seed and seed treatments in O-9897on disease incidence, seed quality, seed yield, stick yield and fibre yield at KRS, BJRI

Interaction among containers and seed treatments	Percent disease incidence	Field emergence (%)	Plant stand/m ²	Plant height (M)	Base diameter (mm)	Fibre yield (gm/plant)	Stick yield (gm/Plant)	Fibre yield (t/ha)	Stick yield (t/ha)	Number of branch/plant	Number of pod/plant	Seed yield (gm/plant)	Seed yield (kg/ha)	1000- seed weight (gm)
T1 X D1	2.35 i	68.00 a	34.83 a	3.14 a	15.47 bc	9.00 bcde	26.33 a	3.55 ab	9.76 a	4.00 a	24.90 cd	4.67 abcd	418.55 a	1.39 abcd
T2 X D1	5.84 g	62.50 bcd	25.67 e	3.08 ab	15.23 bcd	8.50 cde	22.67 cde	3.06 abc	8.14 b	3.67 ab	25.90 abc	4.30 bcde	365.45 c	1.85 a
T3 X D1	5.77 g	65.50 ab	28.97 c	2.89 abc	16.10 b	8.00 cde	20.33 efg	3.85 a	8.08 b	3.33 ab	23.20 cde	4.70 abcd	344.00 def	1.78 ab
T4 X D1	7.09 f	65.67 ab	27.50 d	2.89 abc	15.89 bc	10.00 abc	24.50 abc	3.09 abc	6.88 de	3.00 ab	23.60 cde	5.00 abcd	340.23 efg	1.22 cd
T5 X D1	9.10 de	60.83 bcde	25.30 ef	2.78 abc	15.65 bc	10.00 abc	21.17 defg	3.32 ab	7.04 de	3.33 ab	25.60 bc	5.00 abcd	344.65 def	1.53 abcd
T6 X D1	3.61 h	59.83 cdef	31.53 b	2.91 abc	19.57 a	11.00 ab	23.67 bcd	3.36 ab	9.67 a	3.33 ab	22.60 cdef	4.50 abcde	403.12 ab	1.12 d
T1 X D2	3.35 hi	68.00 a	24.93 ef	2.69 c	13.93 fg	10.00 abc	23.33 bcd	3.50 ab	7.18 cd	3.45 ab	21.40 defg	4.20 cde	406.34 a	1.32 bcd
T2 X D2	6.01 fg	62.17 bcd	24.20 fg	2.73 bc	14.18 efg	9.50 abcd	21.67 defg	2.88 abc	7.27 cd	3.33 ab	22.80 cdef	4.30 bcde	350.12 cdef	1.65 abc
T3 X D2	9.97 cd	63.83 abc	24.20 fg	2.79 abc	14.25 efg	8.00 cde	21.16 defg	2.67 abc	6.91 de	4.00 a	17.90 g	3.00 f	322.55 gh	1.11 d
T4 X D2	9.22 de	61.83 bcde	23.10 g	2.86 abc	15.47 bc	10.00 abc	21.83 defg	3.45 ab	6.62 de	3.00 ab	29.20 a	5.50 a	323.43 gh	1.42 abcd

T5 X D2	9.60 de	61.83 bcde	17.60 i	2.83 abc	15.03 cde	9.50 abcd	25.33 ab	3.44 ab	6.44 e	2.67 b	28.90 ab	4.56 abcd	335.66 fg	1.13 d
T6 X D2	6.11 fg	59.67 cdef	25.30 ef	2.82 abc	14.91 cdef	9.00 bcde	22.00 cdef	3.77 a	7.85 bc	3.00 ab	29.20 a	5.33 ab	362.09 cd	1.12 d
T1 X D3	6.35 fg	61.17 bcde	20.53 h	2.65 c	14.45 defg	7.50 de	23.33 bcd	2.48 abc	5.18 fg	3.33 ab	19.40 fg	5.00 abcd	388.12 b	1.39 abcd
T2 X D3	12.84 a	56.83 ef	16.50 ij	2.67 c	13.95 fg	8.00 cde	19.50 fg	2.02 abc	5.67 f	3.00 ab	20.00 efg	4.00 de	345.62 def	1.12 d
T3 X D3	11.47 b	58.50 def	23.10 g	2.73 bc	14.23 efg	9.00 bcde	20.17 efg	2.57 abc	4.33 h	3.27 ab	20.70 efg	4.33 bcde	334.55 fg	1.18 cd
T4 X D3	11.39 b	55.00 f	15.77 j	2.77 abc	15.31 bcd	11.50 a	19.33 g	3.16 abc	5.14 fg	2.67 b	18.50 g	3.50 ef	313.65 h	1.22 cd
T5 X D3	10.93 bc	60.50 bcde	16.50 ij	2.76 bc	13.76 g	7.50 de	22.16 cde	1.90 bc	4.63 gh	3.00 ab	17.80 g	4.00 de	324.65 gh	1.23 cd
T6 X D3	8.61 e	59.33 cdef	17.23 i	2.76 bc	14.35 bcd	7.00 e	23.67 bcd	1.39 c	4.91 gh	2.67 b	19.50 fg	5.20 abc	355.12 cde	1.22 cd
Level of significance	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

T₁, Tin pot; T₂, Plastic pot; T₃, Poly bag; T₄, Gunny bag lined with polyethylene; T₅, Cloth bag; T₆, IRR poly bag; D₁, Seed treated with BAU- Biofungicide (3%); D₂, Seed treated with Provax-200 (0.4%); D₃, Control (Untreated) Data in column having common letter(s) do not differ significantly at 5% level of significance.

Table 4 Interaction effect among the different types of containers used for storing seed, seed treatments and locations in O-9897 on disease incidence, seed quality, seed yield, stick yield and fibre yield

Interaction among containers, seed treatments and locations	Percent disease incidence	Field emergence (%)	Plant stand/m ²	Plant height (M)	Base diameter (mm)	Fibre yield (gm/plant)	Stick yield (gm/Plant)	Fibre yield (t/ha)	Stick yield (t/ha)	Number of branch/plant	Number of pod/plant	Seed yield (gm /plant)	Seed yield (kg/ha)	1000- seed weight (gm)
T1 X D1 X L1	2.95 no	68.17 a	40.60 a	3.01	16.14 bcdef	13.33 c	26.33 d	5.46 abc	10.76 a	4.00 ab	25.33 def	4.78 abcde	422.44 a	1.49 abcd
T2 X D1 X L1	3.86 lmn	64.33 abcde	34.07 d	3.17	16.69 b	20.00 a	32.67 a	6.81 a	11.14 a	4.67 a	33.00 a	4.12 defgh	356.32 i	1.67 abcd
T3 X D1 X L1	4.83 kl	66.67 ab	29.40 g	3	16.51 bc	16.67 b	30.67 abc	4.95 bcd	9.08 b	4.00 ab	25.67 def	4.15 defgh	324.00 x	1.84 a
T4 X D1 X L1	5.81 jk	65.17 abcd	28.47 hi	3.11	15.81 bcdefg	13.33 c	24.50 defgh	3.69 defgh	6.88 efg	4.00 ab	32.00 ab	4.00 efg	333.33 u	1.25 bcd
T5 X D1 X L1	6.02 ij	61.17 cdefgh	37.33 b	3.1	16.39 bcd	16.67 b	30.17 bc	6.21 ab	11.04 a	3.33 bcd	24.67 defg	4.56 bcdef	344.65 n	1.56 abcd
T6 X D1 X L1	4.14 lm	59.67 efg	30.33 f	3.08	16.31 bcde	20.00 a	32.00 ab	6.07 ab	9.67 b	3.33 bcd	20.33 ijklm	4.50 bcdefg	403.12 d	1.22 bcd
T1 X D2 X L1	3.95 lmn	68.17 a	26.60 l	2.83	16.05 bcdef	10.00 def	23.33 efg	2.66 efg	6.18 hij	3.00 cd	18.33 lm	4.55 bcdef	378.56 f	1.45 abcd
T2 X D2 X L1	4.03 lmn	62.33 bcdefg	33.60 d	2.94	15.75 bcdefgh	10.00 def	21.67 ijklmn	3.36 defgh	7.27 de	4.00 ab	27.00 cd	4.30 cdefgh	327.67 v	1.75 abc
T3 X D2 X L1	9.03 ef	66.67 ab	27.53 jk	2.94	15.76 bcdefgh	13.33 c	25.50 def	3.59 defgh	6.91 efg	4.00 ab	21.33 hijkl	3.67 fghi	356.23 i	1.67 abcd
T4 X D2 X L1	7.94 gh	61.00 cdefgh	28.00 ij	2.97	15.13 defghij	10.00 def	21.83 ijklm	3.17 efg	6.62 efg	4.00 ab	20.33 ijklm	4.50 bcdefg	323.43 y	1.25 bcd
T5 X D2 X L1	6.52 ij	61.00 cdefgh	27.07 kl	2.94	15.59 bcdefgh	13.33 c	25.33 def	3.69 defgh	6.44 ghi	3.33 bcd	22.00 ghijk	4.33 cdefgh	335.66 s	1.55 abcd
T6 X D2 X L1	6.64 ij	55.83 ijkl	26.60 l	3.02	15.51 bcdefghi	16.67 b	29.00 c	4.43 cde	7.85 cd	3.00 cd	20.00 ijklm	4.24 defgh	342.46 p	1.22 bcd
T1 X D3 X L1	6.95 hij	58.00 ghijkl	26.60 l	2.97	15.70 bcdefgh	10.00 def	24.83 defg	3.08 efg	5.58 jkl	3.67 bc	20.00 ijklm	4.56 bcdef	348.75 l	1.45 abcd
T2 X D3 X L1	10.86 bc	55.50 jkl	23.33 o	2.87	15.34 cdefghi	13.33 c	21.50 ijklmn	2.33 fghi	6.14 ij	3.33 bcd	24.67 defg	4.00 efg	314.34 i	1.68 abcd
T3 X D3 X L1	10.53 bcd	57.67 ghijkl	21.93 q	2.76	15.46 bcdefghi	10.00 def	23.17 fghij	2.19 fghi	5.05 klm	3.67 bc	19.00 klm	3.67 fghi	304.55 j	1.15 d
T4 X D3 X L1	10.11 cde	54.50 l	31.73 e	2.85	15.06 defghijk	10.00 def	21.00 jklmn	2.80 efg	4.95 klm	3.00 cd	17.67 m	3.60 ghi	313.65 i	1.21 cd
T5 X D3 X L1	7.85 gh	53.83 l	22.40 pq	2.75	15.03 efg	10.00 def	21.00 jklmn	3.08 efg	5.63 jk	3.00 cd	18.00 m	3.66 fghi	334.25 t	1.12 d
T6 X D3 X L1	9.14 ef	57.67 ghijkl	23.33 o	2.92	14.55 ghijk	13.33 c	25.67 de	2.66 efg	5.91 ij	2.67 d	17.67 m	4.20 defgh	337.56 r	1.22 bcd
T1 X D1 X L2	2.35 o	68.00 a	34.83 c	3.14	15.47 bcdefghi	9.00 fgh	26.33 d	3.55 defgh	9.76 b	4.00 ab	24.90 defg	4.67 abcde	418.55 b	1.39 abcd
T2 X D1 X L2	5.84 jk	62.50 bcdefg	25.667 m	3.08	15.23 cdefghij	8.50 fghi	22.67 ghijk	3.06 efg	8.14 c	3.67 bc	25.90 de	4.30 cdefgh	365.45 g	1.85 a
T3 X D1 X L2	5.77 jk	65.50 abc	28.97 gh	2.89	16.10 bcdef	8.00 ghi	20.33 klmn	3.85 def	8.08 c	3.33 bcd	23.20 efg	4.70 abcde	344.00 o	1.78 ab
Cont'd														
T4 X D1 X L2	7.09 hi	65.67 abc	27.50 jk	2.89	15.89 bcdefg	10.00 def	24.50 defgh	3.09 efg	6.88 efg	3.00 cd	23.60 efg	5.00 abcd	340.23 q	1.22 bcd
T5 X D1 X L2	9.10 ef	60.83 cdefgh	25.30 m	2.78	15.65	10.00 def	21.17 jklmn	3.32 defgh	7.04 efg	3.33 bcd	25.60 def	5.00 abcd	344.65 n	1.53 abcd

					bcdefgh									
T6 X D1 X L2	3.61 mn	59.83 efghij	31.53 e	2.91	19.57 a	11.00 de	23.67 efghi	3.36 defgh	9.6 b7	3.33 bcd	22.60 fghij	4.50 bcdefg	403.12 d	1.12 d
T1 X D2 X L2	3.35 mno	68.00 a	24.93 mn	2.69	13.93 jk	10.00 def	23.33 efghij	3.50 defgh	7.18 def	3.45 bcd	21.40 hijkl	4.20 defgh	406.34 c	1.32 abcd
T2 X D2 X L2	6.01 ij	62.17 bcdefg	24.20 n	2.73	14.18 ijk	9.50 efg	21.67 ijklmn	2.88 efghi	7.27 de	3.33 bcd	22.80 efghi	4.30 cdefgh	350.12 k	1.65 abcd
T3 X D2 X L2	9.97 cde	63.83 abcdef	24.20 n	2.79	14.25 ijk	8.00 ghi	21.16 jklmn	2.67 efghi	6.91 efgh	4.00 ab	17.90 m	3.00 i	322.55 z	1.11 d
T4 X D2 X L2	9.22 ef	61.83 cdefg	23.10 op	2.86	15.47	10.00 def	21.83 ijklm	3.45 defgh	6.62 efghi	3.00 cd	29.20 c	5.50 a	323.43 y	1.42 abcd
T5 X D2 X L2	9.60 def	61.83 cdefg	17.60 s	2.83	15.03 bcdefghi efghijk	9.50 efg	25.33 def	3.44 defgh	6.44 fghi	2.67 d	28.90 c	4.56 bcdef	335.66 s	1.13 d
T6 X D2 X L2	6.11 def	59.67 efghijk	25.30 m	2.82	14.91 fghijk	9.00 fgh	22.00 ijkl	3.77 defg	7.85 cd	3.00 cd	29.20 bc	5.33 ab	362.09 h	1.12 d
T1 X D3 X L2	6.35 ij	61.17 cdefgh	20.53 r	2.65	14.45 hijk	7.50 hi	23.33 efghij	2.48 fghi	5.18 klm	3.33 bcd	19.40 jklm	5.00 abcd	388.12 e	1.39 abcd
T2 X D3 X L2	12.84 a	56.83 hijkl	16.50 tu	2.67	13.95 jk	8.00 ghi	19.50 mn	2.02 ghi	5.67 jk	3.00 cd	20.00 ijklm	4.00 efgh	345.62 m	1.12 d
T3 X D3 X L2	11.47 b	58.50 ghijkl	23.10 op	2.73	14.23 ijk	9.00 fgh	20.17 lmn	2.57 fghi	4.33 n	3.27 bcd	20.70 hijklm	4.33 cdefgh	334.55 t	1.18 d
T4 X D3 X L2	11.39 b	55.00 kl	15.77 u	2.77	15.31 cdefghi	11.50 d	19.33 n	3.16 efghi	5.14 klm	2.67 d	18.50 lm	3.50 hi	313.65 i	1.22 bcd
T5 X D3 X L2	10.93 bc	60.50 defghi	16.50 tu	2.76	13.76 k	7.50 hi	22.16 hijkl	1.90 hi	4.63 mn	3.00 cd	17.80 m	4.00 efgh	324.65 w	1.23 bcd
T6 X D3 X L2	8.61 fg	59.33 fghijk	17.23 st	2.76	14.35 bcdefghi	7.00 i	23.67 efghi	1.39 i	4.90 lmn	2.67 d	19.50 jklm	5.20 abc	355.12 j	1.22 bcd
Level of significance	0.05	0.05	0.05	NS	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

T₁, Tin pot; T₂, Plastic pot; T₃, Poly bag; T₄, Gunny bag lined with polyethylene; T₅, Cloth bag; T₆, IRRI poly bag; D₁, Seed treated with BAU-Biofungicide (3%); D₂, Seed treated with Provax-200 (0.4%); D₃, Control (Untreated); L₁, JAES, Manikgonj, BJRI; L₂, KRS, Kishoregonj, BJRI. Data in column having common letter(s) do not differ significantly at 5% level of significance. NS, Not significant.