

Table S1: ANOVA of the interaction between red rice genotypes, defense enzymes and time series as influenced by *N. lugens* infestation

| Source | DF | Sum of Squares | Mean Square | F-Ratio | p-Value | CD at 5% |
|---|------|----------------|-------------|-----------|---------|----------|
| Replication | 2 | 11.053 | 5.527 | 3.220 | 0.0402 | - |
| Genotypes (F1) | 30 | 4607.778 | 153.593 | 89.499 | <.0001 | 0.43 |
| Defense Enzymes (F2) | 5 | 162887.159 | 32577.432 | 18982.964 | <.0001 | 0.19 |
| Time series (F3) | 3 | 6031.147 | 2010.382 | 1171.456 | <.0001 | 0.15 |
| Genotypes (F1) x Defense Enzymes (F2) | 150 | 11842.081 | 78.947 | 46.003 | <.0001 | 1.05 |
| Defense Enzymes (F2) x Time series (F3) | 15 | 25902.127 | 1726.809 | 1006.216 | <.0001 | 0.86 |
| Genotypes (F1) x Time Series (F3) | 90 | 557.223 | 6.191 | 3.608 | <.0001 | 0.38 |
| Genotype (F1) x Defense Enzymes (F2) x Time series (F3) | 450 | 3348.471 | 7.441 | 4.336 | <.0001 | 28.40 |
| Error | 1486 | 2550.185 | 1.716 | - | - | - |
| Total | 2231 | 217737.223 | . | - | - | - |

F1 = Factor 1, F2 = Factor 2, F3 = Factor 3, CV% = 6.760, R² = 0.988

Table S2: Total Phenol (mg/g FW) accumulation in red rice genotypes after *N. lugens* feeding

| Sl. No | Category (Score) | Genotypes | 0 HAR | 24 HAI | 48 HAI | 72 HAI |
|--------|------------------|--------------------|------------------|-----------------|-----------------|------------------|
| 1 | R (3) | Bavdi | 14.35(22.26) *ab | 33.96(35.64) ab | 61.22(51.48)abc | 48.62(44.21)a-d |
| 2 | R (3) | Bacharya Khuta | 22.23(28.13)a | 27.96(31.92)ab | 63.15(52.62)a | 51.71(45.98)a |
| 3 | HR (1) | Sonahanan | 28.33(32.16)a | 35.27(36.44)a | 62.33(52.14)de | 43.21(41.10)a-f |
| 4 | HR (1) | Mata Meher | 29.86(33.12) a | 33.76(35.53)ab | 65.98(54.32)a | 49.07(44.47)a-c |
| 5 | HR (1) | Hermonona | 23.64(29.09)a | 32.14(34.53)ab | 64.34(53.33)a | 45.35(42.33)a-e |
| 6 | HR (1) | Manipuri Black | 23.69(29.12)a | 35.62(36.64)a | 62.05(51.97)ab | 41.85(40.31)a-f |
| 7 | R (3) | Sati Kh-16 | 13.30(21.39)ab | 27.10(31.37)ab | 48.21(43.98)de | 40.91(39.77)a-f |
| 8 | R (3) | Uttar Bangalocal-3 | 27.84(31.84)a | 32.20(34.57)ab | 46.45(42.96)de | 36.83(37.36)c-f |
| 9 | R (3) | Bandi Marhan | 15.54(23.22)ab | 29.41(32.84)ab | 45.39(42.36)de | 37.90(38.00)b-f |
| 10 | R (3) | Chapa khusi-1 | 13.36(21.44) ab | 32.78(34.93)ab | 49.59(44.76)de | 43.48(41.25)a-f |
| 11 | R (3) | Chadai Guda | 12.20(20.44)ab | 29.36(32.81)ab | 44.82(42.03)de | 38.97(38.63)a-f |
| 12 | R (3) | Manipuri | 19.44(26.16)ab | 30.66(33.62)ab | 51.85(46.06)b-d | 38.83(38.55)a-f |
| 13 | R (3) | Mujni | 12.16(20.41)ab | 32.69(34.87)ab | 50.27(45.15)c-e | 33.86(35.58)e-g |
| 14 | R (3) | Kakharua | 18.21(25.26)ab | 32.71(34.88)ab | 48.76(44.29)de | 39.56(38.97)a-f |
| 15 | R (3) | Lechade dhan | 13.40(21.48)ab | 32.14(34.53)ab | 45.73(42.55)de | 39.66(39.03)a-f |
| 16 | MR (5) | Rajesh | 11.49(19.81)ab | 28.49(32.26)ab | 46.72(43.12)de | 35.30(36.45)d-f |
| 17 | MR (5) | Meghi | 13.69 (21.72) ab | 29.18 (32.70)ab | 46.57(43.03) de | 39.27 (38.80)a-f |
| 18 | MR (5) | Balam | 11.31(19.65) ab | 21.58 (27.68) b | 43.52 (41.28)de | 37.97(38.04)b-f |
| 19 | MR (5) | Khuti Dhan | 9.32(17.77)ab | 30.91(33.78)ab | 45.60(42.48)de | 38.71(38.48)a-f |
| 20 | MR (5) | Gerua Mudi | 10.14(18.57)ab | 27.63(31.71)ab | 43.57(41.30)de | 35.62(36.64)d-f |
| 21 | MR (5) | Sakta-1 | 8.76 (17.21)ab | 26.07(30.70)ab | 42.23(40.53)d | 22.18(28.10)g |
| 22 | MR (5) | Shial Bhomra | 14.50(22.39)ab | 25.60(30.40)ab | 46.75(43.14)de | 35.95(36.84)c-f |
| 23 | MR (5) | Binni | 17.19(24.49)ab | 28.70(32.39)ab | 42.68(40.79)de | 35.45(36.54)d-f |

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|--------------------------|--------|-----------------|----------------|----------------|----------------|-----------------|
| 24 | MR (5) | Kalshepa Kh-16 | 11.11(19.47)ab | 25.42(30.28)ab | 41.97(40.38)de | 37.37(37.68)b-f |
| 25 | MR (5) | Maria Dhan-2 | 11.95(20.23)ab | 29.04(32.61)ab | 46.75(43.14)de | 36.83(37.36)c-f |
| 26 | MR (5) | Maha Baisur | 15.89(23.49)ab | 28.74(32.42)ab | 46.52(43.01)de | 34.07(35.71)e-g |
| 27 | MR (5) | Mudi Futa | 9.83(18.27)ab | 30.67(33.63)ab | 39.51(38.95)e | 30.87(33.75)fg |
| 28 | MR (5) | Sarka Dhan | 10.48(18.89)ab | 27.64(31.72)ab | 40.37(39.45)e | 32.54(34.78)e-g |
| 29 | HR (1) | Salkati (Check) | 27.23(31.46)a | 32.56(34.79)ab | 71.32(57.62)a | 50.70(45.40)ab |
| 30 | HR (1) | PTB-33 (Check) | 27.46(31.60)a | 32.38(34.68)ab | 62.57(52.28)ab | 41.86(40.32)a-f |
| 31 | HS (9) | TN1 (Check) | 4.55(12.31)b | 6.80(15.11)c | 9.39(17.84)f | 5.57(13.66)h |
| DF | | | 30 | 30 | 30 | 30 |
| Treatment Sum of Squares | | | 2592.04 | 1322.29 | 4562.33 | 2992.22 |
| F value | | | 4.2634 | 8.7692 | 48.3906 | 99.7409 |
| p-Value | | | <.0001 | <.0001 | <.0001 | <.0001 |
| CV(%) | | | 19.51 | 6.87 | 3.99 | 5.60 |
| SE(d) | | | 3.676 | 1.831 | 1.447 | 1.730 |
| Tukey HSD at 1% | | | 16.51 | 8.224 | 6.503 | 7.771 |

Mean of three replications in a column, followed by the common letter are not significantly different ($P = 0.05$)

*Figures in parenthesis are transformed square root values; HAI: Hour after infestation

HR: Highly Resistant, MR: Moderately Resistant, MS: Moderately Susceptible, HS: Highly Susceptible

Table S3: Peroxidase (POD) activity (UA/g FW) in red rice genotypes after *N. lugens* feeding

| Sl. No | Category (Score) | Genotypes | 0 HAR | 24 HAI | 48 HAI | 72 HAI |
|--------|------------------|--------------------|----------------|-----------------|-------------------|-----------------|
| 1 | R (3) | Bavdi | 2.85 (9.71)*cd | 4.35 (12.03)c | 5.74(13.86)bc | 5.61(13.70)b |
| 2 | R (3) | Bacharya Khuta | 2.79 (9.61)d | 4.38 (12.08)c | 5.43(13.47)cd | 4.23(11.87)fg |
| 3 | HR (1) | Sonahanan | 1.55 (7.15)l | 4.21 (11.84)c | 5.82(13.96)cd | 5.64(13.73)de |
| 4 | HR (1) | Mata Meher | 2.07 (8.28)hi | 5.21 (13.19)a | 6.30(14.53)a | 5.98(14.16)a |
| 5 | HR (1) | Hermonona | 1.81 (7.73)j | 4.34 (12.02)c | 5.38(13.41)cd | 4.52(12.27)de |
| 6 | HR (1) | Manipuri Black | 1.56 (7.17)kl | 5.10 (13.05)a | 6.15(14.36)ab | 5.53(13.60)b |
| 7 | R (3) | Sati Kh-16 | 2.19 (8.51)gh | 3.32 (10.50)ijk | 5.00(12.92)def | 4.69(12.51)cd |
| 8 | R (3) | Uttar Bangalocal-3 | 2.39 (8.90)ef | 2.98 (9.93)mn | 4.09(11.66)lmn | 3.88(11.37)hij |
| 9 | R (3) | Bandi Marhan | 2.35 (8.82)f | 2.65 (9.38)q | 4.14(11.74)klmn | 3.76(11.18)jk |
| 10 | R (3) | Chapa khusi-1 | 2.74 (9.53)d | 3.37 (10.57)hij | 4.16(11.77)jklmn | 4.14(11.74)fg |
| 11 | R (3) | Chadai Guda | 1.69 (7.46)jk | 3.22 (10.34)jkl | 4.69(12.51)fgh | 4.58(12.36)d |
| 12 | R (3) | Manipuri | 2.53 (9.15)e | 4.74 (12.57)b | 4.03(11.58)mn | 3.85(11.31)ijk |
| 13 | R (3) | Mujni | 1.61 (7.28)kl | 2.79 (9.61)opq | 4.25(11.90)ijklm | 4.12(11.70)fgh |
| 14 | R (3) | Kakharua | 2.38 (8.88)ef | 2.90 (9.80)no | 4.55(12.32)ghij | 4.13(11.73)fg |
| 15 | R (3) | Lechade dhan | 2.53 (9.16)e | 3.12 (10.18)lm | 4.80(12.65)efg | 4.65 (12.45)cd |
| 16 | MR (5) | Rajesh | 1.98 (8.09)i | 3.75 (11.16)e | 4.24(11.89)ijklm | 4.13(11.73)fg |
| 17 | MR (5) | Meghi | 3.22 (10.34)a | 3.69(11.08)e | 4.49 (12.23)ghijk | 4.07 (11.64)ghi |
| 18 | MR (5) | Balam | 3.03 (10.03)b | 3.30 (10.46)ijk | 4.09(11.66)lmn | 3.89(11.37)hij |
| 19 | MR (5) | Khuti Dhan | 2.74 (9.54)d | 3.99 (11.53)d | 5.19(13.17)de | 4.32(12.00)ef |
| 20 | MR (5) | Gerua Mudi | 2.80 (9.63)d | 3.64 (10.99)ef | 4.32(11.99)hijklm | 3.86(11.34)ij |
| 21 | MR (5) | Sakta-1 | 1.19 (6.26)m | 3.17 (10.25)kl | 5.21(13.20)de | 4.86(12.73)c |
| 22 | MR (5) | Shial Bhomra | 1.24 (6.39)m | 2.75 (9.55)pq | 4.21(11.84)ijklm | 3.88(11.35)ij |

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|--------------------------|--------|-----------------|----------------|-----------------|-------------------|----------------|
| 23 | MR (5) | Binni | 2.14 (8.42)gh | 3.58 (10.91)efg | 4.22(11.85)jklm | 4.01(11.56)ghi |
| 24 | MR (5) | Kalshepa Kh-16 | 2.16 (8.46)gh | 3.64 (11.00)ef | 4.43(12.14)ghijkl | 4.20(11.82)fg |
| 25 | MR (5) | Maria Dhan-2 | 2.80 (9.64)d | 3.60 (10.94)efg | 4.13(11.72)klmn | 3.86(11.33)fg |
| 26 | MR (5) | Maha Baisur | 1.64 (7.37)kl | 4.22 (11.86)c | 3.78(11.22)no | 3.62(10.97)k |
| 27 | MR (5) | Mudi Futa | 1.54 (7.13)l | 2.90 (9.80)nop | 4.65 (12.45)fghi | 4.22(11.85)fg |
| 28 | MR (5) | Sarka Dhan | 1.18 (6.24)m | 3.52 (10.82)fgh | 4.34(12.03)hijklm | 4.23(11.86)fg |
| 29 | HR (1) | Salkati (Check) | 3.14 (10.20)ab | 4.30 (11.96)c | 5.95(14.12)ab | 4.88(12.77)c |
| 30 | HR (1) | PTB-33 (Check) | 2.98 (9.95)bc | 4.23 (11.87)c | 5.16(13.13)de | 4.32(12.00)ef |
| 31 | HS (9) | TN1 (Check) | 2.29 (8.71)fg | 3.44 (10.69)ghi | 3.62(10.98)o | 2.84(9.71)l |
| DF | | | 30 | 30 | 30 | 30 |
| Treatment Sum of Squares | | | 132.52 | 94.13 | 83.08 | 75.56 |
| F value | | | 681.2918 | 669.3151 | 120.0399 | 289.2772 |
| p-Value | | | <.0001 | <.0001 | <.0001 | <.0001 |
| CV(%) | | | 0.95 | 0.620 | 1.210 | 0.78 |
| SE(d) | | | 0.066 | 0.056 | 0.124 | 0.076 |
| Tukey HSD at 1% | | | 0.296 | 0.252 | 0.558 | 0.343 |

Mean of three replications in a column, followed by the common letter are not significantly different (P = 0.05)

*Figures in parenthesis are transformed square root values; HAI: Hour after infestation

HR: Highly Resistant, MR: Moderately Resistant, MS: Moderately Susceptible, HS: Highly Susceptible

Table S4: Polyphenol oxidase (PPO) activity (UA/g FW) in red rice genotypes after *N. lugens* feeding

| Sl. No | Category (Score) | Genotypes | 0 HAR | 24 HAI | 48 HAI | 72 HAI |
|--------|------------------|--------------------|----------------|----------------|-----------------|------------------|
| 1 | R (3) | Bavdi | 6.28 (14.51)ef | 8.53 (16.98)c | 11.49 (19.82)bc | 8.35 (16.80)abcd |
| 2 | R (3) | Bacharya Khuta | 6.76 (15.07)cd | 8.49 (16.94)c | 9.65 (18.10) ef | 7.83 (16.25)abcd |
| 3 | HR (1) | Sonahanan | 7.62 (16.02)b | 8.61 (17.07)c | 11.87 (20.15)b | 9.53 (17.98)ab |
| 4 | HR (1) | Mata Meher | 7.57 (15.97)b | 10.06 (18.49)a | 12.36 (20.58)a | 9.65 (18.10)ab |
| 5 | HR (1) | Hermonona | 6.85 (15.17)c | 8.37 (16.82)c | 9.89 (18.33)e | 7.86 (16.28)abcd |
| 6 | HR (1) | Manipuri Black | 6.34 (14.58)e | 8.98 (17.44)b | 10.62 (19.02)d | 8.90 (17.36)abc |
| 7 | R (3) | Sati Kh-16 | 4.54 (12.30)m | 6.72 (15.02)fg | 8.36(16.81)jk | 7.60 (16.01)bcde |
| 8 | R (3) | Uttar Bangalocal-3 | 5.65 (13.75)i | 6.15 (14.36)h | 7.85 (16.27)mn | 5.85 (14.00)ef |
| 9 | R (3) | Bandi Marhan | 5.72 (13.83)hi | 7.75 (16.16)d | 8.90 (17.36)hi | 7.33 (15.71)cdef |
| 10 | R (3) | Chapa khusi-1 | 5.89 (14.04)g | 7.11 (15.47)e | 9.21 (17.67)gh | 6.50 (14.78)def |
| 11 | R (3) | Chadai Guda | 5.82 (13.96)gh | 7.00 (15.34)ef | 7.30 (15.67)pq | 6.47 (14.73)def |
| 12 | R (3) | Manipuri | 6.37 (14.62)e | 7.08 (15.44)e | 8.30 (16.74)k | 6.88 (15.20)cdef |
| 13 | R (3) | Mujni | 4.75 (12.59)l | 5.70 (13.81)ij | 6.54 (14.81)r | 5.59(13.67)fg |
| 14 | R (3) | Kakharua | 5.35 (13.38)j | 6.15 (14.36)h | 7.93 (16.36)lmn | 6.79 (15.11)def |
| 15 | R (3) | Lechade dhan | 4.65 (12.46)lm | 5.98 (14.15)h | 8.78 (17.23)i | 5.82 (13.96)ef |
| 16 | MR (5) | Rajesh | 4.99 (12.91)k | 6.63 (14.93)g | 8.20 (16.64)kl | 6.91 (15.24)cdef |
| 17 | MR (5) | Meghi | 2.33 (08.77)p | 5.96 (14.13)hi | 7.32 (15.70)pq | 6.75 (15.06)def |
| 18 | MR (5) | Balam | 4.15 (11.76)o | 5.62 (13.71)j | 7.53 (15.93)op | 5.80 (13.94)ef |
| 19 | MR (5) | Khuti Dhan | 4.75 (12.59)l | 6.00 (14.18)h | 7.39 (15.77)pq | 6.60(14.88)def |
| 20 | MR (5) | Gerua Mudi | 6.65 (14.94) d | 7.52 (15.92)d | 8.20 (16.64)kl | 7.29 (15.66)def |
| 21 | MR (5) | Sakta-1 | 6.15 (14.36)f | 6.54 (14.82)g | 9.36 (17.81)fg | 7.36(15.74)cdef |
| 22 | MR (5) | Shial Bhomra | 4.98 (12.89)k | 7.65 (16.05)d | 9.24 (17.70)gh | 6.84 (15.16)def |
| 23 | MR (5) | Binni | 5.68 (13.79)hi | 6.55 (14.83)g | 8.30(16.74)kl | 6.93 (15.26)cdef |

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|--------------------------|--------|-----------------|---------------|----------------|-----------------|------------------|
| 24 | MR (5) | Kalshepa Kh-16 | 4.27 (11.92)o | 6.08 (14.27)h | 7.75 (16.16)no | 6.54 (14.82)def |
| 25 | MR (5) | Maria Dhan-2 | 5.66 (13.76)i | 6.21 (14.43)h | 8.14 (16.58)klm | 6.53 (14.81)def |
| 26 | MR (5) | MahaBaisur | 4.40 (12.11)n | 5.71 (13.82)ij | 7.11 (15.47)q | 4.24 (11.89)g |
| 27 | MR (5) | MudiFuta | 5.92 (14.08)g | 6.53 (14.80)g | 8.64 (17.09)ij | 7.25 (15.62)cdef |
| 28 | MR (5) | SarkaDhan | 4.92 (12.82)k | 6.79 (15.11)fg | 9.67 (18.12)ef | 7.94 (16.37)abcd |
| 29 | HR (1) | Salkati (Check) | 7.92 (16.35)a | 9.16 (17.61)b | 11.49 (19.81)c | 9.52 (17.97)ab |
| 30 | HR (1) | PTB-33 (Check) | 6.31 (14.55)e | 9.90 (18.34)a | 11.35 (19.68)c | 9.83 (18.27)a |
| 31 | HS (9) | TN1 (Check) | 4.61 (12.40)m | 5.19 (13.17)k | 6.74 (15.05)r | 6.88 (15.20)def |
| DF | | | 30 | 30 | 30 | 30 |
| Treatment Sum of Squares | | | 210.76 | 184.47 | 218.05 | 186.34 |
| F value | | | 3138.22 | 794.00 | 845.31 | 17.46 |
| p-Value | | | <.0001 | <.0001 | <.0001 | <.0001 |
| CV(%) | | | 0.35 | 0.57 | 0.54 | 3.84 |
| SE(d) | | | 0.039 | 0.072 | 0.076 | 0.487 |
| Tukey HSD at 1% | | | 0.1736 | 0.3228 | 0.3402 | 2.1879 |

Mean of three replications in a column, followed by the common letter are not significantly different (P = 0.05)

*Figures in parenthesis are transformed square root values; HAI: Hour after infestation

HR: Highly Resistant, MR: Moderately Resistant, MS: Moderately Susceptible, HS: Highly Susceptible

Table S5: Superoxide dismutase (SOD) activity (mol UA/mg protein) in red rice genotypes after *N. lugens* feeding

| Sl. No | Category (Score) | Genotypes | 0 HAR | 24 HAI | 48 HAI | 72 HAI |
|--------|------------------|--------------------|-----------------|----------------|-----------------|------------------|
| 1 | R (3) | Bavdi | 4.78(12.63)*a | 5.22(13.20)ab | 5.33(13.35)a | 5.08 (13.02)a |
| 2 | R (3) | Bacharya Khuta | 5.07(13.01)a | 5.30(13.31)ab | 5.38(13.42)a | 5.03 (12.96)a |
| 3 | HR (1) | Sonahanan | 4.67(12.48)a | 5.62(13.71)a | 5.53(13.61)a | 4.99 (12.91)a |
| 4 | HR (1) | Mata Meher | 4.91(12.80) a | 5.22(13.20)ab | 5.37(13.39)a | 5.03 (12.96)a |
| 5 | HR (1) | Hermonona | 4.73(12.57)a | 5.07(13.01)b | 5.22(13.20)a | 4.98 (12.90)a |
| 6 | HR (1) | Manipuri Black | 4.96(12.87)a | 5.34(13.37)ab | 5.37(13.39)a | 4.98 (12.90)a |
| 7 | R (3) | Sati Kh-16 | 3.19(10.28)c-g | 3.97(11.49)cd | 4.10(11.69)bc | 4.16 (11.76) b |
| 8 | R (3) | Uttar Bangalocal-3 | 3.39(10.61) b-e | 3.60(10.94)def | 4.11(11.70)bc | 3.83 (11.29)bcd |
| 9 | R (3) | Bandi Marhan | 3.38(10.60)b-f | 3.53(10.83)efg | 3.98(11.50)bc | 3.79 (11.23)bcd |
| 10 | R (3) | Chapa khusi-1 | 3.37(10.57)b-g | 3.64(10.99)def | 3.97(11.49)bc | 3.67 (11.04)cde |
| 11 | R (3) | Chadai Guda | 3.23(10.36) b-g | 3.44(10.68)f-h | 4.08(11.66)bc | 3.52 (10.81)def |
| 12 | R (3) | Manipuri | 3.43(10.68)bcd | 3.98(11.50)cd | 4.22(11.85)b | 4.08 (11.66)bc |
| 13 | R (3) | Mujni | 3.83(11.29)bc | 3.88(11.36)cde | 4.41(12.12)b | 4.08 (11.66)bc |
| 14 | R (3) | Kakharua | 2.98(9.93) d-h | 3.33(10.52)f-i | 4.07(11.63)bc | 3.64 (10.99)cde |
| 15 | R (3) | Lechade dhan | 3.87(11.34) b | 4.18(11.80)c | 4.40(12.11)b | 4.17 (11.78)b |
| 16 | MR (5) | Rajesh | 2.55(9.18)hi | 3.01(10.00)ij | 3.23(10.35)efg | 2.95 (9.89) h |
| 17 | MR (5) | Meghi | 2.75 (9.55) ghi | 3.04 (10.05)ij | 3.23 (10.35)efg | 3.10 (10.15) fgh |
| 18 | MR (5) | Balam | 2.55(9.19)hi | 3.14(10.21)g-j | 3.30(10.47)d-g | 3.27 (10.42)e-h |
| 19 | MR (5) | Khuti Dhan | 2.90(9.80) d-h | 3.30(10.47)f-i | 3.52(10.81)de | 3.39 (10.60)d-g |
| 20 | MR (5) | Gerua Mudi | 2.78(9.59)e-i | 3.07(10.09)hij | 3.50(10.78)de | 3.09 (10.12)fgh |
| 21 | MR (5) | Sakta-1 | 2.81(9.64)d-i | 2.98(9.95)ij | 3.25(10.39)efg | 3.30 (10.47)e-h |
| 22 | MR (5) | Shial Bhomra | 2.75(9.55)f-i | 3.08(10.11)hij | 3.36(10.56)d-g | 3.33 (10.52)e-h |

| | | | | | | |
|--------------------------|--------|-----------------|---------------|---------------|----------------|------------------|
| 23 | MR (5) | Binni | 2.26(8.64)ij | 2.95(9.89)ij | 3.30(10.47)d-g | 3.16 (10.24) fgh |
| 24 | MR (5) | Kalshepa Kh-16 | 2.55(9.19)hi | 2.95(9.89)ij | 3.17(10.25)efg | 2.97 (9.93)gh |
| 25 | MR (5) | Maria Dhan-2 | 2.25(8.63) ij | 2.92(9.83)j | 3.07(10.09)fg | 3.07 (10.09)gh |
| 26 | MR (5) | MahaBaisur | 2.28(8.69)ij | 2.52(9.13)k | 3.18(10.27)efg | 3.09 (10.13) fgh |
| 27 | MR (5) | MudiFuta | 2.92(9.83)d-h | 2.99(9.96)ij | 3.69(11.08)cd | 3.65 (11.01) cde |
| 28 | MR (5) | SarkaDhan | 2.76(9.56)e-i | 2.98(9.93)ij | 3.37(10.57)def | 3.32 (10.50)e-h |
| 29 | HR (1) | Salkati (Check) | 4.74(12.57)a | 5.08(13.02)b | 5.08(13.02)a | 4.97 (12.88)a |
| 30 | HR (1) | PTB-33 (Check) | 4.88(12.77) a | 5.08(13.02) b | 5.23(13.22)a | 4.83 (12.69)a |
| 31 | HS (9) | TN1 (Check) | 1.93(7.99)j | 2.23(8.59)k | 2.97(9.92)g | 2.11 (8.35)i |
| DF | | | 30 | 30 | 30 | 30 |
| Treatment Sum of Squares | | | 203.98 | 187.09 | 132.68 | 132.24 |
| F value | | | 83.33 | 210.09 | 138.77 | 121.42 |
| p-Value | | | <.0001 | <.0001 | <.0001 | <.0001 |
| CV (%) | | | 2.71 | 1.55 | 1.54 | 1.70 |
| SE(d) | | | 0.233 | 0.141 | 0.146 | 0.156 |
| Tukey HSD at 1% | | | 1.047 | 0.632 | 0.654 | 0.699 |

Mean of three replications in a column, followed by the common letter are not significantly different (P = 0.05)

*Figures in parenthesis are transformed square root values; HAI: Hour after infestation

HR: Highly Resistant, MR: Moderately Resistant, MS: Moderately Susceptible, HS: Highly Susceptible

Table S6: Catalase (CAT) activity (mol UA/mg protein) in red rice genotypes after *N. lugens* feeding

| Sl. No | Category (Score) | Genotypes | 0 HAR | 24 HAI | 48 HAI | 72 HAI |
|--------|------------------|--------------------|------------------------------|----------------------------|----------------------------|-------------------|
| 1 | R (3) | Bavdi | 37.14 (37.55)*a | 45.55(42.45)a | 32.43(34.72)a | 19.42(26.15)a |
| 2 | R (3) | Bacharya Khuta | 32.03 (34.47)b | 42.01(40.40)ab | 25.42(30.28)b | 17.27(24.56)ab |
| 3 | HR (1) | Sonahanan | 19.50(26.21)ghijk | 34.88(36.20)def | 22.72(28.46)bcde | 12.37(20.59)defg |
| 4 | HR (1) | Mata Meher | 25.09(30.06)def | 40.04(39.26)bc | 21.64(27.72)bcdef | 14.40(22.30)bcde |
| 5 | HR (1) | Hermonona | 26.82(31.19)cd | 36.58(37.22)cde | 21.72(27.78)bcdef | 13.65(21.68)bcdef |
| 6 | HR (1) | Manipuri Black | 23.54(29.02)defg | 37.49(37.75)cd | 17.27(24.56)ghijklm | 14.14(22.09)bcde |
| 7 | R (3) | Sati Kh-16 | 18.50(25.48)ijk | 31.42(34.09)efgh | 20.65(27.03)cdefg | 12.67(20.85)cdefg |
| 8 | R (3) | Uttar Bangalocal-3 | 13.65(21.68)m | 20.41(26.86)no | 13.66(21.69)no | 11.78(20.08)defg |
| 9 | R (3) | Bandi Marhan | 12.78 (20.95)m | 27.06(31.34)ijkl | 17.61(24.82)ghijkl | 11.26(19.61)efgh |
| 10 | R (3) | Chapa khusi-1 | 21.39(27.55)efghijk | 29.20(32.71)ghijk | 19.41(26.14)efghij | 13.39(21.47)cdef |
| 11 | R (3) | Chadai Guda | 19.26(26.03)hijk | 22.38(28.24)mn | 13.66(21.69)no | 10.60(19.00)defg |
| 12 | R (3) | Manipuri | 22.15(28.08) ^{hijk} | 27.40(31.56) ^{mn} | 16.96(24.32) ^{no} | 12.41(20.63)efgh |
| 13 | R (3) | Mujni | 19.26(26.03)hijk | 29.62(32.97)ghij | 16.54(24.00)ijklnm | 11.36(19.69)efgh |
| 14 | R (3) | Kakharua | 25.33 (30.22)def | 37.03(37.48)cd | 24.36(29.58)bc | 13.58(21.62)bcdf |
| 15 | R (3) | Lechade dhan | 18.50(25.48)jk | 25.43(30.28)klm | 18.44(25.43)efghijk | 11.51(19.84)efgh |
| 16 | MR (5) | Rajesh | 26.31(30.86)de | 35.11(36.34)def | 16.14(23.69)jklmn | 11.51(19.84)efgh |
| 17 | MR (5) | Meghi | 13.94 (21.92)lm | 22.38 (28.24)mn | 14.73 (22.57)lmn | 12.25 (20.48)defg |
| 18 | MR (5) | Balam | 21.75 (27.80)efghij | 30.35 (33.43)ghi | 20.40(26.85)defgh | 16.28 (23.80)abc |
| 19 | MR (5) | Khuti Dhan | 19.26(26.03)efghij | 22.38(28.24)hijkl | 18.51(25.48)hijklmn | 13.40(21.48)defg |
| 20 | MR (5) | Gerua Mudi | 17.53(24.75)kl | 31.41(34.08)efgh | 21.56(27.67)bcdef | 15.33(23.05)bcd |
| 21 | MR (5) | Sakta-1 | 22.47(28.29)efghi | 25.57(30.38)jklm | 16.78(24.18)hijklnm | 12.25(20.48)defg |
| 22 | MR (5) | Shial Bhomra | 11.52(19.84)m | 24.42(29.61)lm | 14.06(22.02)mno | 13.26(21.35)cdef |

| | | | | | | |
|--------------------------|--------|-----------------|--------------------|-------------------|---------------------|-------------------|
| 23 | MR (5) | Binni | 19.26(26.03)hijk | 27.38(31.55)hijkl | 22.46(28.29)bcde | 13.25(21.34)cdef |
| 24 | MR (5) | Kalshepa Kh-16 | 21.47(27.60)efghij | 26.33(30.88)ijkl | 19.93(26.51)efghi | 12.51(20.71)defg |
| 25 | MR (5) | Maria Dhan-2 | 31.27(34.00)cd | 40.48(39.51)cde | 18.44(25.43)bcdef | 11.60(19.91)bcdef |
| 26 | MR (5) | Maha Baisur | 12.25(20.48)m | 27.47(31.61)hijkl | 19.26(26.03)hijklmn | 12.58(20.77)defg |
| 27 | MR (5) | Mudi Futa | 12.41(20.62)m | 19.50(26.21)no | 15.46(23.15)klmn | 11.40(19.73)efgh |
| 28 | MR (5) | Sarka Dhan | 13.42(21.49)m | 20.41(26.86)no | 16.37(23.87)klmn | 9.81(18.25)efgh |
| 29 | HR (1) | Salkati (Check) | 23.28(28.85)defgh | 35.19(36.39)def | 24.20(29.47)bcd | 12.58(20.77)cdefg |
| 30 | HR (1) | PTB-33 (Check) | 24.52(29.68)kl | 32.42(34.70)efgh | 17.36(24.62)bcdef | 13.70(21.72)bcd |
| 31 | HS (9) | TN1 (Check) | 13.39(21.47)m | 17.36(24.63)o | 11.34(19.68)o | 8.41(16.85)h |
| DF | | | 30 | 30 | 30 | 30 |
| Treatment Sum of Squares | | | 1757.22 | 1870.37 | 835.53 | 288.87 |
| F value | | | 98.36 | 122.30 | 51.06 | 13.92 |
| p-Value | | | <.0001 | <.0001 | <.0001 | <.0001 |
| CV(%) | | | 2.880 | 2.170 | 2.870 | 3.960 |
| SE(d) | | | 0.630 | 0.584 | 0.603 | 0.679 |
| Tukey HSD at 1% | | | 2.831 | 2.620 | 2.703 | 3.050 |

Mean of three replications in a column, followed by the common letter are not significantly different (P = 0.05)

*Figures in parenthesis are transformed square root values; HAI: Hour after infestation

HR: Highly Resistant, MR: Moderately Resistant, MS: Moderately Susceptible, HS: Highly Susceptible

Table S7: Total soluble proteins (mg/g FW) in red rice genotypes after *N. lugens* feeding

| Sl. No | Category (Score) | Genotypes | 0 HAR | 24 HAI | 48 HAI | 72 HAI |
|--------|------------------|--------------------|-----------------|------------------|-----------------|-----------------|
| 1 | R (3) | Bavdi | 9.35(17.81) e-l | 7.33(15.71)i-l | 6.17(14.38)fgh | 5.83 (13.98)d-g |
| 2 | R (3) | Bacharya Khuta | 7.44(15.83)kl | 7.17(15.53)jkl | 6.17(14.38)fgh | 5.33(13.35)fg |
| 3 | HR (1) | Sonahanan | 8.58(17.04)g-l | 7.92(16.34)g-l | 6.92(15.25)e-h | 5.58(13.67)d-g |
| 4 | HR (1) | Mata Meher | 7.25(15.62)kl | 6.33(14.58)l | 5.26(13.26)c-f | 4.75(12.59)g |
| 5 | HR (1) | Hermonona | 8.00(16.43)jkl | 7.65(16.06)hijkl | 6.75(15.06)e-h | 5.25(13.25)d-g |
| 6 | HR (1) | Manipuri Black | 6.67(14.96)l | 6.33(14.58)l | 5.92(14.08)fgh | 4.83(12.70)g |
| 7 | R (3) | Sati Kh-16 | 8.92(17.37)f-l | 8.17(16.61)g-l | 8.33(16.78)c-f | 8.58(17.04)a-f |
| 8 | R (3) | Uttar Bangalocal-3 | 11.83(20.12)b-i | 9.83(18.28)e-k | 7.67(16.07)b-h | 5.83(13.98)d-g |
| 9 | R (3) | Bandi Marhan | 12.17(20.41)b-h | 11.00(19.37)c-h | 9.33(17.79)b-e | 7.33(15.71)b-g |
| 10 | R (3) | Chapa khusi-1 | 13.17(21.28)b-e | 13.33(21.42)a-e | 10.58(18.98)a-d | 9.34(17.80)a-d |
| 11 | R (3) | Chadai Guda | 9.34(17.80)e-l | 7.26(15.63)i-l | 5.92(14.08)f-h | 5.40(13.44)f-g |
| 12 | R (3) | Manipuri | 8.67(17.12)f-l | 7.33(15.71)i-l | 5.42(13.46)gh | 5.42(13.46)fg |
| 13 | R (3) | Mujni | 8.08(16.52)jkl | 7.25(15.62)i-l | 7.17(15.53)e-h | 5.48(13.54)efg |
| 14 | R (3) | Kakharua | 13.42(21.49)abc | 12.42(20.63)abc | 10.42(18.83)ab | 8.67(17.12)a-e |
| 15 | R (3) | Lechade dhan | 10.67(19.06)d-k | 10.83(19.22)d-i | 9.42(17.87)b-e | 7.58(15.98)b-g |
| 16 | MR (5) | Rajesh | 13.33(21.42)b-e | 11.25(19.60)b-h | 9.43(17.89)b-e | 7.33(15.71)b-g |
| 17 | MR (5) | Meghi | 18.47 (25.46)a | 16.50 (23.97)a | 13.33 (21.42)a | 12.17 (20.41)a |
| 18 | MR (5) | Balam | 15.83(23.45)ab | 15.42 (23.12)ab | 13.25(21.35)a | 11.17 (19.52)ab |
| 19 | MR (5) | Khuti Dhan | 15.17(22.92)abc | 15.17(22.92)abc | 11.83(20.12)ab | 9.25(17.71)a-e |
| 20 | MR (5) | Gerua Mudi | 13.17(21.28)b-e | 12.08(20.34)a-f | 9.42(17.87)b-e | 7.25(15.62)b-g |
| 21 | MR (5) | Sakta-1 | 13.92(21.90)a-d | 10.83(19.22)d-i | 9.25(17.71)b-e | 6.92(15.25)c-g |

| | | | | | | |
|--------------------------|--------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 22 | MR (5) | Shial Bhomra | 11.33(19.67)c-j | 9.42(17.87)e-l | 8.25(16.69)c-g | 7.13(15.49)b-g |
| 23 | MR (5) | Binni | 10.33(18.75)d-k | 10.33(18.75)d-j | 8.00(16.43)c-h | 6.92(15.25)c-g |
| 24 | MR (5) | Kalshepa Kh-16 | 15.17(22.92)f-l | 14.00(21.97)g-l | 12.50(20.70)c-f | 10.83(19.22)a-f |
| 25 | MR (5) | Maria Dhan-2 | 14.42(22.31)a-d | 12.83(20.99)a-f | 11.00(19.37)abc | 9.25(17.71)a-e |
| 26 | MR (5) | Maha Baisur | 12.50(20.70)b-f | 11.67(19.97)b-g | 9.33(17.79)b-e | 7.75(16.16)b-g |
| 27 | MR (5) | Mudi Futa | 12.32(20.55)b-g | 10.83(19.22)d-i | 9.42(17.87)b-e | 8.08(16.52)a-g |
| 28 | MR (5) | Sarka Dhan | 11.25(19.60)c-j | 9.25(17.71)f-l | 7.42(15.80)d-h | 6.67(14.96)d-g |
| 29 | HR (1) | Salkati (Check) | 8.42(16.86)h-l | 6.32(14.56)l | 6.00(14.18)fgh | 5.42(13.46)fg |
| 30 | HR (1) | PTB-33 (Check) | 8.17(16.61)jkl | 6.58(14.87)kl | 6.08(14.28)fgh | 5.50(13.56)efg |
| 31 | HS (9) | TN1 (Check) | 15.25(22.99)abc | 13.17(21.28)a-f | 10.67(19.06)b-e | 9.25(17.71)b-g |
| DF | | | 30 | 30 | 30 | 30 |
| Treatment Sum of Squares | | | 672.83 | 705.85 | 506.14 | 408.49 |
| F value | | | 22.84 | 23.65 | 20.91 | 10.22 |
| p-Value | | | <.0001 | <.0001 | <.0001 | <.0001 |
| CV (%) | | | 5.070 | 5.410 | 5.32 | 7.440 |
| SE(d) | | | 0.809 | 0.814 | 0.733 | 0.94 |
| Tukey HSD at 1% | | | 3.634 | 3.658 | 3.294 | 4.23 |

Mean of three replications in a column, followed by the common letter are not significantly different (P = 0.05)

*Figures in parenthesis are transformed square root values; HAI: Hour after infestation

HR: Highly Resistant, MR: Moderately Resistant, MS: Moderately Susceptible, HS: Highly Susceptible

Table S8: Crude silica (%) in red rice genotypes after *N. lugens* feeding

| Sl. No | Category (Score) | Genotypes | Silica (%) |
|--------|------------------|--------------------|------------------|
| 1 | R (3) | Bavdi | 4.17 (11.78) b-j |
| 2 | R (3) | Bacharya Khuta | 4.45 (12.18) b-j |
| 3 | HR (1) | Sonahanan | 7.25 (15.62) abc |
| 4 | HR (1) | Mata Meher | 8.42 (16.86) a |
| 5 | HR (1) | Hermonona | 6.58 (14.87) a-e |
| 6 | HR (1) | Manipuri Black | 8.08 (16.52) a |
| 7 | R (3) | Sati Kh-16 | 5.58 (13.67) a-h |
| 8 | R (3) | Uttar Bangalocal-3 | 6.42 (14.67) a-f |
| 9 | R (3) | Bandi Marhan | 4.34 (12.02) b-j |
| 10 | R (3) | Chapa khusi-1 | 5.92 (14.08) a-h |
| 11 | R (3) | Chadai Guda | 6.36 (14.61) a-g |
| 12 | R (3) | Manipuri | 6.33 (14.58)a-g |
| 13 | R (3) | Mujni | 5.25 (13.25)a-i |
| 14 | R (3) | Kakharua | 5.08 (13.03) a-j |
| 15 | R (3) | Lechade dhan | 5.92 (14.08) a-h |
| 16 | MR (5) | Rajesh | 3.31 (10.48) h-j |
| 17 | MR (5) | Meghi | 3.73 (11.14) d-j |
| 18 | MR (5) | Balam | 3.19 (10.30) h-j |
| 19 | MR (5) | Khuti Dhan | 4.00 (11.54) c-j |
| 20 | MR (5) | Gerua Mudi | 3.92 (11.41) d-j |

| | | | |
|-----------------|--------|-----------------|------------------|
| 21 | MR (5) | Sakta-1 | 3.33 (10.52) g-j |
| 22 | MR (5) | Shial Bhomra | 3.42 (10.65) f-j |
| 23 | MR (5) | Binni | 3.30 (10.47) h-j |
| 24 | MR (5) | Kalshepa Kh-16 | 3.42 (10.65) f-j |
| 25 | MR (5) | Maria Dhan-2 | 6.50 (14.77)a-e |
| 26 | MR (5) | Maha Baisur | 3.39 (10.61) f-j |
| 27 | MR (5) | Mudi Futa | 3.63 (10.99) e-j |
| 28 | MR (5) | Sarka Dhan | 2.64 (9.36) ij |
| 29 | HR (1) | Salkati (Check) | 7.42 (15.80) ab |
| 30 | HR (1) | PTB-33 (Check) | 6.92 (15.25)a-d |
| 31 | HS (9) | TN1 (Check) | 2.48 (9.06) j |
| DF | | | 30 |
| Sum of Squares | | | 454.35 |
| F value | | | 12.00 |
| p-Value | | | <.0001 |
| CV (%) | | | 8.850 |
| SE(d) | | | 0.971 |
| Tukey HSD at 1% | | | 4.119 |

Mean of three replications in a column, followed by the common letter are not significantly different (P = 0.05)

*Figures in parenthesis are transformed square root values; HAI: Hour after infestation

HR: Highly Resistant, MR: Moderately Resistant, MS: Moderately Susceptible, HS: Highly Susceptible