Table Seedling Resistance Test results of NBDSN (2020-21) against Brown, Black \& Yellow rust at ICAR-IIWBR, RS, Shimla

| S. No. | Line/Variety | PATHOTYPES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Brown Rust |  |  |  |  | Black rust |  |  |  |  | Yellow rust |  |  |  |  |  |  |
|  |  | H1 | H2 | H3 | H4 | H5 | 11 | 21A-2 | 40A | 117-6 | 295 | 24 | 57 | M | G | Q | 6S0 | 7S0 |
| 1. | BH1029 | S | S | MR | S | S | R | S | S | R | S | MS | R | S | S | S | R | R |
| 2. | BH1034 | R | R | R | R | R | MR | S | S | MR | S | R | R | MS | MS | S | R | S |
| 3. | BH1035 | R | R | R | R | MR | R | S | MS | MR | S | S | S | S | MR | S | R | R |
| 4. | BH1036 | S | S | S | S | S | R | S | MS | MR | S | R | S | S | S | R | R | R |
| 5. | BH1037 | R | MR | MR | R | R | R | S | MR | MS | S | R | S | R | MS | S | R | S |
| 6. | BH1038 | S | R | MS | S | S | S | MR | S | MS | MS | R | MS | S | S | R | R | S |
| 7. | BH1039 | S | MR | MS | MS | S | MR | S | R | MR | S | MS | MS | S | MS | S | S | S |
| 8. | BHS483 | S | S | S | S | S | MS | S | MR | MR | R | MS | MR | MR | R | MS | R | R |
| 9. | BHS484 | S | S | S | S | S | S | S | S | S | MS | R | R | R | R | R | R | R |
| 10. | BHS485 | NG | NG | MR | MS | S | MR | R | MR | R | MS | S | S | S | MS | S | R | S |
| 11. | BHS486 | R | R | R | S | R | MS | MS | S | MS | S | R | R | MS | R | MS | R | R |
| 12. | BHS487 | S | R | MS | S | S | S | S | MR | S | S | MS | MS | R | R | S | R | S |
| 13. | DWRB218 | S | S | S | S | S | MS | S | S | MR | S | S | S | S | S | S | R | R |
| 14. | DWRB219 | MR | MS | MR | S | S | R | MR | R | S | R | S | S | S | R | S | R | S |
| 15. | DWRB220 | S | S | S | S | MR | MR | MS | MR | MR | S | S | S | S | MR | R | R | S |
| 16. | DWRB221 | S | S | MR | MS | S | R | S | S | MR | MR | S | R | S | R | S | R | R |
| 17. | DWRB222 | S | MR | MS | S | S | R | R | MR | R | R | R | R | R | R | R | R | R |
| 18. | DWRB223 | MS | R | R | R | R | MR | S | MS | MR | R | MS | S | MS | R | S | S | S |
| 19. | DWRB224 | MS | MS | MR | S | S | MS | S | MS | MS | MR | S | R | S | R | S | R | R |
| 20. | HBL869 | R | R | R | R | R | MR | MR | MR | S | R | R | R | NG | R | MS | R | R |
| 21. | HBL870 | MR | R | MR | S | MR | MR | MR | S | MR | R | MS | MS | S | R | S | R | S |
| 22. | HBL871 | R | S | R | R | NG | MR | MR | MR | R | R | R | R | S | MS | R | R | NG |
| 23. | HBL872 | R | R | R | R | R | S | R | MR | MR | MR | R | R | S | R | S | R | S |
| 24. | HBL873 | R | R | R | R | MR | R | S | MR | MR | S | S | MS | MS | R | R | R | S |
| 25. | HUB272 | NG | NG | MS | MS | R | NG | MS | R | NG | NG | R | R | NG | NG | NG | NG | NG |
| 26. | HUB275 | S | MS | MS | S | MS | MR | S | MS | R | R | MS | S | MS | R | MS | R | R |
| 27. | HUB276 | R | NG | R | R | R | S | R | MS | R | R | NG | NG | NG | NG | NG | NG | NG |
| 28. | HUB277 | MR | MR | NG | NG | MS | R | R | MR | R | R | R | S | NG | R | R | R | R |
| 29. | HUB279 | MR | R | R | R | R | MR | R | R | MR | R | R | R | R | R | R | R | R |
| 30. | HUB280 | NG | NG | NG | NG | R | R | S | MR | R | NG | MR | NG | NG | NG | NG | R | S |
| 31. | K1822 | S | MS | NG | MS | S | R | S | R | R | S | R | R | R | R | R | NG | R |
| 32. | KB1822 | NG | NG | NG | MS | S | R | R | NG | R | S | NG | NG | NG | NG | NG | NG | NG |
| 33. | KB1909 | NG | NG | NG | S | NG | R | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG |
| 34. | KB1911 | NG | NG | NG | R | NG | NG | NG | R | R | R | NG | NG | NG | NG | NG | NG | NG |
| 35. | KB1912 | S | S | MS | MS | S | R | R | S | R | S | R | R | NG | R | R | R | R |
| 36. | KB1916 | NG | NG | NG | NG | NG | MS | NG | R | NG | R | NG | NG | NG | NG | R | NG | R |
| 37. | KB1926 | NG | R | R | NG | NG | R | MS | R | R | R | MS | S | NG | NG | S | NG | S |
| 38. | KB1939 | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG |
| 39. | KB1940 | NG | NG | NG | NG | NG | R | S | R | R | NG | NG | S | NG | NG | NG | NG | S |
| 40. | KB1944 | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG |


| 41. | KB1946 | NG | NG | R | R | R | R | R | R | NG | R | NG | NG | NG | NG | NG | NG | NG |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 42. | KB1947 | NG | NG | NG | R | NG | R | NG | R | NG | R | NG | R | NG | NG | NG | R | S |
| 43. | NDB1752 | MR | S | MS | MS | MS | S | MR | R | R | MR | S | S | S | S | S | S | S |
| 44. | NDB1754 | R | S | R | R | MS | MR | S | MR | R | MR | S | S | S | MS | S | R | S |
| 45. | NDB1756 | S | MR | MS | S | MR | MR | MR | S | R | S | R | R | R | S | R | R | S |
| 46. | PL911 | MS | MS | MS | S | MR | MS | S | S | MR | S | R | R | R | R | R | R | R |
| 47. | PL917 | S | MS | MR | S | S | MR | S | MS | S | S | R | R | R | R | R | R | R |
| 48. | PL926 | R | R | MR | S | MR | R | R | S | MR | MS | R | R | R | R | NG | NG | R |
| 49. | PL927 | R | R | R | NG | R | R | S | S | R | S | R | R | R | R | NG | R | R |
| 50. | PL928 | S | MR | MR | S | MR | R | S | MR | R | MR | R | R | NG | R | R | R | R |
| 51. | PL929 | R | R | R | R | R | MR | MS | R | R | S | MS | MR | MS | R | MR | R | R |
| 52. | PL930 | R | NG | R | R | S | R | R | MR | R | MR | MS | R | NG | R | S | NG | S |
| 53. | PL931 | R | NG | NG | NG | NG | R | MS | MR | R | S | S | NG | S | NG | S | NG | R |
| 54. | PL932 | R | R | MR | S | MR | MR | MR | MR | S | MR | S | S | S | S | S | R | R |
| 55. | RD3012 | S | S | S | S | S | MR | S | MR | S | S | S | MS | S | S | S | R | R |
| 56. | RD3013 | R | R | R | R | R | MR | S | S | R | S | S | S | S | S | S | R | MS |
| 57. | RD3016 | R | R | R | R | R | MR | S | MS | R | S | R | R | R | R | R | R | R |
| 58. | RD3027 | R | MR | MS | MR | MR | MS | MS | MR | S | S | S | MS | S | MR | S | R | MS |
| 59. | RD3028 | R | R | MR | MR | MR | MS | S | S | MR | S | S | R | S | MS | S | S | S |
| 60. | RD3029 | R | S | S | MR | MR | MR | MS | MR | MS | S | S | S | S | S | S | S | MS |
| 61. | RD3030 | S | MR | S | MS | MS | S | S | MR | MS | S | S | S | S | S | S | R | S |
| 62. | RD3031 | S | MR | MR | S | S | S | MR | MR | R | MR | R | R | R | R | R | R | R |
| 63. | RD3032 | MR | R | R | R | R | MS | MR | MS | MS | S | R | R | R | R | R | R | R |
| 64. | RD3033 | MR | MR | MR | R | S | MS | S | S | S | S | R | R | R | R | R | R | R |
| 65. | RD3034 | S | MR | S | S | MS | MR | R | R | MR | MR | R | R | R | R | R | R | R |
| 66. | RD3035 | R | R | R | R | R | MR | MR | S | S | MS | S | MS | S | S | S | R | S |
| 67. | RD3036 | R | R | R | R | R | R | S | MR | S | R | MS | MS | S | S | S | R | S |
| 68. | RD3037 | MS | MR | MS | S | S | S | MR | MS | S | MS | R | R | R | R | R | R | R |
| 69. | RD3038 | R | R | R | R | R | MR | MS | S | S | S | R | R | NG | R | R | R | R |
| 70. | RD3039 | R | R | R | MR | R | MS | MS | MR | R | MS | R | R | R | R | R | R | R |
| 71. | RD3040 | S | MS | MS | S | S | MR | S | MR | MS | R | R | MS | R | R | R | R | S |
| 72. | RD3041 | R | MR | MS | S | S | MS | S | R | R | S | R | R | R | R | R | R | R |
| 73. | RD3042 | R | R | R | R | R | MS | S | MR | R | S | R | R | R | R | R | R | R |
| 74. | UPB1091 | S | R | MR | MS | MR | R | MR | S | S | MR | R | R | R | R | R | R | R |
| 75. | UPB1092 | S | S | MR | S | MS | R | R | MR | R | R | R | R | R | R | R | R | R |
| 76. | UPB1093 | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | R | S |
| 77. | UPB1095 | S | S | MS | S | S | MR | S | S | MR | S | R | R | R | R | R | R | R |
| 78. | UPB1096 | S | S | MR | S | S | MR | R | S | MR | S | R | R | R | NG | R | R | R |
| 79. | UPB1097 | R | R | MR | NG | R | R | S | MR | MS | MR | MS | MS | NG | R | MR | R | R |
| 80. | UPB1098 | S | R | MR | S | MS | R | S | R | MS | S | S | S | NG | S | S | NG | S |
| 81. | VLB170 | R | NG | MR | MR | R | R | R | MS | MS | NG | MS | NG | NG | NG | S | NG | R |
| 82. | VLB171 | R | R | R | MS | R | MR | R | S | MR | MR | R | MS | S | S | MS | R | S |
| 83. | VLB172 | R | R | MS | NG | R | S | MR | R | S | MR | S | MS | S | MR | NG | R | R |
| 84. | VLB173 | R | R | R | R | R | MR | S | MR | S | MS | MS | S | R | MS | S | R | S |
| 85. | VLB174 | R | R | MR | MS | R | R | S | MR | S | MR | R | R | MS | R | S | R | S |


| 86. | BH902 (C) | S | MS | S | S | S | S | S | S | R | S | S | S | S | S | MX | R | S |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 87. | BH946 (C) | S | S | S | S | S | R | S | MS | MS | S | S | R | S | S | S | R | R |
| 88. | BH959 (C) | S | MR | MR | MS | MR | R | S | MS | R | MS | S | MS | S | S | S | S | S |
| 89. | BHS352 (C) | S | MS | MR | S | S | MR | MR | R | MR | R | MS | S | S | R | MS | R | R |
| 90. | BHS380 (C) | R | R | MR | R | R | S | R | R | S | R | NG | R | MS | MS | R | NG | NG |
| 91. | BHS400 (C) | R | R | R | R | R | MS | S | MR | S | S | R | R | R | R | S | R | S |
| 92. | DWRB137 (C) | S | MR | S | MR | MR | MS | S | S | S | S | R | R | R | R | R | R | R |
| 93. | DWRB160 (C) | S | R | MR | MS | MR | R | S | MR | R | S | MR | R | R | R | S | R | S |
| 94. | DWRB182 (C) | S | MR | MS | MR | MR | R | R | R | R | R | R | R | R | R | R | R | R |
| 95. | DWRUB52 (C) | S | S | S | S | S | MS | MS | S | MR | R | S | R | S | R | S | R | S |
| 96. | HBL113 (C) | R | R | R | NG | R | S | S | R | MR | S | NG | R | NG | R | NG | R | S |
| 97. | HUB113 (C) | S | S | MR | S | S | R | S | MS | R | S | R | R | R | R | R | R | R |
| 98. | K603 (C) | S | S | S | S | S | R | R | MS | MR | S | S | S | S | S | S | R | S |
| 99. | KARAN16 (C) | S | MS | MS | S | MS | MR | MS | MS | S | MR | S | S | R | S | S | S | S |
| 100. | LAKHAN (C) | S | MS | MS | S | S | MR | R | MR | S | MS | S | MS | S | S | S | R | S |
| 101. | NDB1173 (C) | S | S | MS | S | MS | MR | MR | MS | S | S | S | S | S | S | S | S | R |
| 102. | NDB943 (C) | S | S | MR | S | MR | MR | MR | MR | MR | S | MS | MS | MR | R | S | S | S |
| 103. | PL891 (C) | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG |
| 104. | RD2794 (C) | S | S | MS | S | S | R | MR | S | MR | MS | R | R | R | R | R | R | R |
| 105. | RD2849 (C) | S | S | S | S | S | R | S | MS | MR | MS | S | S | S | R | MS | S | S |
| 106. | RD2899 (C) | S | S | MR | S | MR | MS | MS | S | S | S | R | R | R | R | R | R | R |
| 107. | RD2907 (C) | S | MS | S | S | S | S | S | MR | S | S | R | R | R | R | R | S | R |
| 108. | VLB118 (C) | R | R | R | R | R | MR | MS | MR | MS | S | S | S | S | MR | S | S | S |

Table Seedling Resistance Test results of EBDSN (2020-21) against Brown, Black \& Yellow rust at ICAR-IIWBR, RS, Shimla

| S. No. | Line/Variety | PATHOTYPES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Brown Rust |  |  |  |  | Black rust |  |  |  |  | Yellow rust |  |  |  |  |  |  |
|  |  | H1 | H2 | H4 | H5 | Mix | 11 | 21A-2 | 40A | 117-6 | 295 | 57 | 24 | M | G | Q | 6S0 | 7S0 |
| 1 | BH 1029 | S | MR | MS | S | MS | MR | MR | S | MR | S | R | MS | MS | S | S | R | R |
| 2 | HBL 113 | R | R | R | R | R | MR | R | MS | MR | NG | MS | S | R | R | NG | NG | R |
| 3 | HUB 272 | MS | NG | R | NG | MR | MR | R | MS | MS | R | NG | R | R | NG | R | R | R |
| 4 | KB 1707 | NG | NG | MS | NG | NG | R | NG | NG | NG | R | NG | NG | NG | NG | NG | NG | NG |
| 5 | PL 906 | S | MR | MS | R | S | MR | MR | S | MR | S | R | R | NG | R | R | R | R |
| 6 | PL 908 | R | R | R | R | R | R | R | MR | R | S | R | R | R | R | R | R | R |
| 7 | RD 2552 | MS | MR | MS | MS | MR | MR | R | S | MR | S | R | R | R | R | R | R | R |
| 8 | RD 2794 | S | R | R | MS | S | MR | MR | MS | R | MS | R | R | R | R | R | R | R |
| 9 | RD 2849 | S | MS | MS | MS | MS | R | R | MR | R | S | R | S | S | R | S | R | S |
| 10 | RD 2899 | MS | MR | MR | MS | S | MS | MR | MR | MR | S | R | R | R | R | R | R | R |
| 11 | RD 2907 | S | MS | MS | MS | MS | S | MR | MS | MS | S | R | R | R | R | R | R | R |
| 12 | RD 3016 | R | R | R | R | R | MR | MR | S | MS | MR | R | R | R | R | R | R | R |
| 13 | RD 3024 | S | MR | S | MR | S | R | R | MS | R | S | S | MS | S | R | S | S | S |
| 14 | VLB 118 | R | R | R | R | R | MR | MR | MR | MS | S | S | S | S | R | S | R | S |
| 15 | VLB 166 | NG | NG | R | R | NG | NG | MS | S | S | NG | R | NG | R | NG | NG | R | NG |
| 16 | VLB 168 | R | R | R | R | R | S | S | MR | MS | S | R | R | S | R | S | R | MR |
| 17 | KB 1817 | S | MS | MS | MR | S | R | MR | MR | MR | MS | R | R | R | R | R | R | R |
| 18 | KB 1830 | S | NG | S | R | S | R | MR | MS | S | S | R | R | R | R | R | R | R |
| 19 | DWRB 123 | S | MR | S | S | MS | R | R | MS | R | MR | S | S | R | S | MS | R | S |
| 20 | DWRB 197 | R | R | R | R | R | R | R | R | R | R | S | S | S | R | S | R | S |
| 21 | DWRB 210 | S | MR | MS | MS | MS | R | R | S | MR | R | R | R | R | R | R | R | R |
| 22 | DWRB 211 | S | MS | S | MR | S | R | MR | S | R | MS | S | S | S | S | S | R | S |
| 23 | DWRB 217 | R | R | R | MR | MR | R | R | S | MR | R | S | S | MS | MS | S | R | S |

