Table: Seedling resistance test results of NBDSN and NBDSN against leaf, stem \& stripe rust during 2019-20 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 | 122 | 57 | 24 | M | G | Q | 6S0 | 7S0 |
| 1. | ABI Kranti | R | MR | S | R | S | R | S | MR | R | MR | S | S | S | R | S | S | S |
| 2. | BH1026 | S | MS | MS | MS | S | MR | MS | MS | R | MR | S | S | S | S | S | S | S |
| 3. | BH1027 | S | MS | MS | MR | S | S | MR | MR | R | R | S | S | S | S | S | S | S |
| 4. | BH1028 | MS | R | MS | S | S | R | MS | MR | MS | R | S | S | S | S | S | S | S |
| 5. | BH1029 | MR | R | R | MS | MS | S | S | S | MS | R | R | R | R | R | MS | R | R |
| 6. | BH1030 | MS | R | MR | R | MS | MR | MR | R | MR | R | R | R | R | R | R | R | R |
| 7. | BH1031 | MS | MS | MR | MS | MS | R | MS | MR | R | R | MS | S | S | R | S | S | S |
| 8. | BH1032 | MR | R | R | R | MR | MS | R | R | R | MS | S | MS | MS | S | MS | S | S |
| 9. | BH1033 | S | S | S | S | S | S | MR | S | S | MR | MS | MS | S | MX | S | S | MS |
| 10. | BHS478 | R | R | R | R | R | MS | R | MR | MR | MR | R | R | R | R | R | R | R |
| 11. | BHS479 | R | R | R | R | R | NG | S | S | R | R | R | MR | R | R | R | R | R |
| 12. | BHS480 | R | R | R | R | R | S | R | R | R | R | S | S | MS | R | S | MX | S |
| 13. | BHS481 | R | R | R | R | R | R | R | R | MR | R | R | R | R | R | R | R | R |
| 14. | BHS482 | R | R | R | R | R | MS | R | R | R | R | R | R | R | R | R | R | R |
| 15. | DWRB182 | MS | MS | R | R | MS | R | R | R | R | R | R | R | R | R | R | R | R |
| 16. | DWRB196 | MR | R | R | R | R | MR | R | S | MR | R | MR | S | S | S | MS | R | S |
| 17. | DWRB197 | R | R | R | R | R | R | R | R | R | R | S | S | S | S | S | S | S |
| 18. | DWRB204 | R | R | R | R | R | R | R | MR | R | R | S | MS | MS | R | MS | MR | MS |
| 19. | DWRB209 | R | R | R | R | R | R | R | R | R | MR | S | S | S | MS | S | S | MS |
| 20. | DWRB210 | S | S | R | S | S | R | R | S | R | R | S | R | R | R | R | R | R |
| 21. | DWRB211 | MS | NG | R | MR | MS | S | R | R | R | MR | S | S | S | S | S | S | S |
| 22. | DWRB212 | MS | R | R | S | S | R | R | R | R | R | S | S | S | R | S | S | S |
| 23. | DWRB213 | S | S | MR | R | S | MR | S | MS | MR | MS | R | R | R | R | R | R | R |
| 24. | DWRB214 | S | MS | MS | S | S | S | R | MS | MR | R | S | S | S | S | S | S | S |
| 25. | DWRB215 | S | R | MR | MR | S | MR | MS | MR | MR | R | S | S | S | S | S | S | S |
| 26. | DWRB216 | R | R | R | NG | R | MR | R | S | R | R | R | R | MS | R | MS | S | S |
| 27. | DWRB217 | MS | R | R | R | MS | MR | S | MR | R | R | S | MS | R | R | R | R | R |
| 28. | HBL864 | MS | MS | R | S | S | MS | R | S | R | R | R | MX | MX | R | R | R | R |
| 29. | HBL865 | R | R | R | R | R | S | R | R | MR | R | R | R | R | R | R | R | R |
| 30. | HBL866 | R | S | R | R | S | MS | R | R | R | R | R | S | S | R | MS | R | MS |
| 31. | HBL867 | R | R | R | R | R | R | R | MR | R | R | R | R | R | R | R | R | R |
| 32. | HBL868 | R | R | R | R | R | MS | R | R | MS | R | R | R | R | R | R | R | R |
| 33. | HUB270 | S | S | S | S | S | MR | S | S | R | S | MS | S | S | MS | MS | S | S |


| 34. | HUB271 | MS | R | R | S | S | MR | MS | S | R | R | R | S | S | S | S | S | S |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 35. | HUB272 | NG | R | MR | R | MR | MR | MR | R | MS | R | R | R | S | R | R | S | R |
| 36. | HUB273 | R | R | R | R | R | R | R | MS | R | MR | S | S | S | S | S | MS | MS |
| 37. | HUB274 | MS | S | MS | S | S | S | S | S | S | R | MS | S | S | MS | S | S | S |
| 38. | HUB69 | S | MS | MR | MS | S | R | MR | MR | R | MR | R | R | R | R | R | R | R |
| 39. | K1149 | S | MR | R | MS | S | R | MR | R | R | R | S | S | S | MS | S | R | R |
| 40. | Karan16 | R | MS | R | S | S | S | MS | S | MR | MR | S | S | S | MS | S | S | S |
| 41. | KB1707 | S | MS | MR | S | S | MS | MR | MR | R | R | R | S | R | S | R | R | R |
| 42. | KB1815 | MR | MS | R | MR | MS | MR | R | S | MR | R | MS | S | S | S | S | S | S |
| 43. | KB1816 | S | S | R | S | S | MS | S | R | S | S | S | S | S | S | S | S | S |
| 44. | KB1817 | MS | S | S | MS | S | R | S | S | R | R | R | R | R | R | R | R | R |
| 45. | KB1822 | S | MS | MS | S | S | S | S | MR | MS | S | R | R | R | R | R | R | R |
| 46. | KB1830 | S | R | MS | S | S | R | R | S | MS | MR | R | R | R | R | R | R | R |
| 47. | KB1832 | R | R | R | MR | MR | S | S | R | MR | R | MS | S | S | S | S | S | MS |
| 48. | KB1843 | R | R | R | R | R | MR | R | MS | MS | R | S | S | S | S | S | R | S |
| 49. | KB1845 | R | S | R | MR | S | R | R | MR | MR | MR | S | MS | S | S | S | S | S |
| 50. | KB1848 | R | R | R | R | R | R | R | R | R | R | MS | R | S | MS | S | R | R |
| 51. | NDB1730 | MS | R | R | S | S | S | R | MR | R | R | S | S | S | S | S | S | S |
| 52. | NDB1738 | R | R | R | R | R | MR | MS | S | MR | MS | S | S | S | S | S | S | S |
| 53. | NDB1742 | MR | R | R | S | S | MR | MS | MR | MS | R | S | S | S | S | S | S | S |
| 54. | NDB1748 | R | S | R | R | S | MS | R | MS | R | R | R | MX | S | S | MS | MS | S |
| 55. | PL906 | MR | S | R | S | R | MS | MS | S | S | R | R | R | R | R | R | R | R |
| 56. | PL908 | R | R | R | R | R | MR | R | MR | MS | R | R | R | R | R | R | R | R |
| 57. | PL911 | S | MR | MR | MS | S | MR | S | S | MS | R | R | R | R | R | R | R | R |
| 58. | PL912 | S | R | R | MR | S | MR | S | S | R | MR | MS | S | S | MS | S | S | S |
| 59. | PL915 | MR | R | R | MS | MS | R | R | R | R | R | R | S | S | S | R | S | S |
| 60. | PL916 | R | R | R | R | R | R | MR | S | R | R | R | R | S | MS | S | S | R |
| 61. | PL917 | S | S | MS | S | S | MR | S | S | MR | S | MS | S | MS | MS | MS | R | R |
| 62. | PL918 | R | R | R | R | R | R | MR | R | R | R | MS | MS | MS | R | MS | MS | R |
| 63. | PL919 | R | R | R | R | R | MS | MS | MR | R | R | MS | MS | S | R | MS | S | S |
| 64. | PL920 | R | R | R | R | R | S | S | R | R | R | S | S | S | MS | MS | R | R |
| 65. | PL925 | R | R | R | R | R | R | R | R | R | R | S | S | S | S | MS | S | MS |
| 66. | RD2994 | R | R | R | MS | R | S | MS | MR | R | R | R | R | R | R | R | R | R |
| 67. | RD3011 | R | R | R | R | R | MS | R | R | MR | MR | R | S | S | R | R | R | R |
| 68. | RD3012 | S | S | MS | S | S | MR | S | S | MR | R | MS | S | S | MX | S | S | MS |
| 69. | RD3013 | R | R | R | R | R | MR | MS | S | S | S | S | S | S | S | S | S | S |
| 70. | RD3014 | S | R | R | S | S | S | MS | S | MS | MS | S | S | S | S | S | S | S |
| 71. | RD3015 | R | R | R | R | R | R | R | MS | R | MS | R | R | R | R | R | R | R |


| 72. | RD3016 | R | R | R | R | R | MR | R | R | R | S | R | R | R | R | R | R | R |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 73. | RD3017 | R | R | R | S | S | S | S | S | MR | MS | S | S | S | S | S | S | S |
| 74. | RD3018 | MR | R | R | R | MR | S | MR | R | MR | MR | S | S | S | S | S | S | S |
| 75. | RD3019 | R | R | R | R | R | MR | R | S | MR | R | R | R | R | R | R | R | R |
| 76. | RD3020 | MS | MR | R | S | S | MS | MS | R | S | R | R | R | R | S | R | MX | R |
| 77. | RD3021 | R | R | R | R | R | S | S | R | R | R | R | R | R | R | R | R | R |
| 78. | RD3022 | R | R | R | R | R | R | R | MS | R | MR | R | R | S | R | S | MS | S |
| 79. | RD3023 | S | MR | R | S | S | MR | R | MS | R | R | S | S | S | S | S | S | S |
| 80. | RD3024 | S | MR | MR | S | S | MR | R | MR | R | R | S | S | S | S | S | S | S |
| 81. | RD3025 | S | S | R | MR | S | MR | R | S | R | MR | S | S | S | S | S | MS | S |
| 82. | RD3026 | MR | MR | R | R | MR | S | R | MR | MR | MR | MS | S | S | MS | S | S | S |
| 83. | UPB1080 | R | R | R | R | R | S | MS | S | MS | R | S | S | S | S | S | S | S |
| 84. | UPB1083 | MS | MS | MS | MS | MS | S | S | S | MR | R | R | R | R | R | R | R | R |
| 85. | UPB1084 | MS | R | NG | R | MS | MR | MS | MR | MS | R | S | S | S | MS | S | S | S |
| 86. | UPB1085 | R | R | R | R | R | R | MS | MS | MS | R | MS | S | S | S | MS | S | S |
| 87. | UPB1086 | R | R | R | R | R | R | R | MS | R | R | R | S | MR | R | MS | MS | R |
| 88. | UPB1087 | MR | MR | R | R | MR | S | MR | MR | S | R | S | S | S | S | S | S | S |
| 89. | UPB1088 | S | R | R | S | S | MR | MS | R | R | MR | R | R | R | R | R | R | R |
| 90. | UPB1089 | S | R | MS | S | S | MR | MS | MR | MR | MR | S | S | S | S | S | S | S |
| 91. | UPB1090 | S | MS | MS | S | S | MR | MS | MR | MR | MR | S | S | S | S | MS | S | S |
| 92. | VLB165 | R | R | R | R | R | S | R | R | R | R | S | S | S | R | MS | R | R |
| 93. | VLB166 | R | R | R | R | R | S | MR | R | R | R | MS | MS | MS | MS | R | R | MS |
| 94. | VLB167 | NG | NG | NG | NG | NG | S | R | R | R | NG | NG | S | S | R | S | S | S |
| 95. | VLB168 | R | R | R | R | R | MS | S | S | MR | R | R | MS | S | S | MS | R | R |
| 96. | VLB169 | R | R | R | R | R | R | R | R | R | R | S | S | S | S | S | R | S |
| 97. | BH902 (C) | S | S | MS | S | S | S | S | S | S | S | R | S | R | R | S | S | S |
| 98. | BH946 (C) | S | S | MR | S | S | S | S | R | MR | MR | MS | S | S | MS | S | S | S |
| 99. | BHS352(C) | MS | S | NG | MS | S | S | R | R | MR | R | S | S | S | S | S | MS | MS |
| 100. | BHS400(C) | R | R | R | R | R | S | MR | MR | MS | R | MS | S | MR | MS | MS | MS | R |
| 101. | DWRB101(C) | S | S | MS | MR | S | MR | R | MR | MR | R | S | S | S | S | S | S | MS |
| 102. | DWRB123(C) | S | S | MS | S | S | MR | R | MR | R | R | S | S | S | S | S | R | S |
| 103. | DWRB137(C) | MS | MS | R | MR | MS | S | MS | S | R | R | R | R | R | R | R | R | R |
| 104. | DWRB160(C) | MR | S | MR | MS | S | S | R | MS | R | R | S | S | S | S | S | S | S |
| 105. | HBL113(C) | R | R | R | R | R | MR | R | R | MR | R | R | R | R | R | R | R | R |
| 106. | K603 (C) | S | MR | MS | S | S | MR | MR | MR | R | MR | MS | S | S | S | S | S | S |
| 107. | Lakhan (C) | S | MR | MS | MS | S | R | MS | MR | R | R | S | S | S | S | S | S | S |
| 108. | NDB1173(C) | S | MS | R | R | S | S | MS | MR | MR | MS | R | S | S | S | S | S | R |
| 109. | NDB943(C) | S | S | R | MS | S | MR | MS | MR | R | R | S | S | S | NG | S | S | S |


| 110. | PL891(I) | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | NG | R | NG | NG | S | NG | S |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 111. | RD2552(C) | S | R | MR | S | S | S | S | S | R | S | R | R | R | R | R | R | R |
| 112. | RD2794(C) | S | S | R | S | S | R | R | MS | MS | MR | R | R | R | R | R | R | R |
| 113. | RD2849 (C) | MS | MS | R | S | S | MR | R | MS | R | R | S | S | S | R | S | S | S |
| 114. | RD2899(C) | MS | MR | R | MS | S | MR | S | S | MS | MR | R | R | R | R | R | R | R |
| 115. | RD2907(C) | S | MS | R | S | S | R | S | MR | MR | S | R | R | R | R | R | R | R |
| 116. | VLB118(C) | R | R | R | R | R | R | MR | R | R | R | S | S | S | R | MS | S | S |

Table Seedling Resistance Test results of EBDSN (2019-20) 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 | 122 | 57 | 24 | M | G | Q | 6S0 | 7S0 |
| 1. | BH-1011 | MS | R | R | MR | MS | MS | R | MR | R | R | S | S | S | S | S | S | S |
| 2. | BH-1018 | MS | R | R | MS | MS | R | MR | R | R | R | S | S | S | S | S | S | MS |
| 3. | BH-1025 | S | R | MR | MS | S | MR | R | R | R | R | MR | R | S | MS | MS | R | R |
| 4. | BK-1714 | MR | R | S | R | S | R | S | R | R | R | R | R | R | R | R | R | R |
| 5. | BK-1719(LB) | R | R | R | R | R | MS | MS | MR | R | R | MS | MS | S | MS | MS | S | MS |
| 6. | DWRB-101 | MS | R | R | R | MS | MR | MR | R | R | R | MS | S | S | R | S | S | MS |
| 7. | DWRB-123 | MS | R | R | MR | MS | MS | R | R | R | MR | S | S | S | R | S | R | R |
| 8. | DWRB-137 | MR | R | MR | R | R | S | MS | S | R | MR | R | R | R | R | R | R | R |
| 9. | DWRB-137 | MS | R | MR | R | MS | S | MS | S | MR | R | R | R | R | R | R | R | R |
| 10. | DWRB-182 | MR | R | R | R | MR | R | R | R | R | R | R | R | R | R | R | R | R |
| 11. | DWRB-184 | R | R | R | R | R | MR | MR | R | R | R | S | S | S | R | MS | S | S |
| 12. | DWRB-197 | R | R | R | R | R | R | R | R | R | R | S | S | S | S | S | S | S |
| 13. | DWRB-198 | MS | R | R | MS | MS | MS | MR | MR | R | R | S | S | S | S | S | S | S |
| 14. | HBL-113 | R | R | R | R | R | MR | R | R | R | NG | R | R | R | R | R | R | R |
| 15. | HBL-845 | R | R | R | R | R | S | MR | MR | R | R | R | R | R | R | R | R | R |
| 16. | HBL-848 | S | S | R | R | S | S | S | MR | R | MS | R | R | R | R | R | R | R |
| 17. | HBL-851 | R | R | R | R | R | MR | S | R | R | R | MS | MS | MS | R | R | S | MS |
| 18. | HBL-858 | S | S | MS | MR | S | R | MS | R | R | R | R | MS | MS | MS | MS | MS | MS |
| 19. | HBL-863 | R | R | R | R | R | S | MR | MS | R | R | R | R | R | R | R | R | R |
| 20. | HUB-268(LB) | S | S | MR | R | S | MS | S | MR | R | MR | S | S | S | MS | S | S | S |
| 21. | KB-1633 | R | R | R | R | R | MR | S | S | R | S | S | S | S | S | S | S | S |
| 22. | KB-1750 | MS | MR | R | R | MS | MS | S | MS | R | R | S | S | S | S | S | S | S |
| 23. | KB-1757 | R | R | R | R | R | R | MR | R | R | R | S | S | S | S | R | S | S |
| 24. | PL-891 | NG | R | NG | NG | NG | NG | R | R | R | NG | NG | NG | R | NG | R | R | NG |
| 25. | PL-906 | S | MS | R | R | S | R | S | S | MR | S | R | R | R | R | R | R | R |
| 26. | PL-908 | R | R | R | R | R | MR | S | MR | MS | R | R | R | R | R | R | R | R |
| 27. | PL-909 | S | MS | R | R | S | R | S | R | MR | S | R | R | R | R | R | R | R |
| 28. | PL-2899 | MS | MS | R | R | MS | MR | S | MR | R | MS | R | R | R | R | R | R | R |
| 29. | PL-2980 | S | MR | MS | MR | S | R | S | S | R | S | R | R | R | R | R | R | R |
| 30. | PL-2981 | R | R | R | R | MR | MR | S | S | R | S | R | R | R | R | R | R | R |
| 31. | PL-2994 | R | MR | R | R | R | MR | S | S | R | MS | R | R | R | R | R | R | R |
| 32. | PL-2999 | R | R | R | R | R | MR | R | MR | R | MR | R | R | R | R | R | R | R |


| 33. | PL-3000 | R | R | R | R | R | MS | MS | S | R | R | R | R | R | R | R | R | R |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 34. | PL-3002 | R | R | R | R | R | R | S | MR | MR | MR | R | R | R | R | R | R | R |
| 35. | PL-3003 | R | R | R | R | R | R | MS | MS | MR | MR | R | R | R | R | R | R | R |
| 36. | PL-3004 | R | R | R | R | R | R | S | MS | MR | MR | R | R | R | R | R | R | R |
| 37. | PL-3005 | MS | S | R | R | S | R | S | MR | MS | MS | R | R | R | R | R | R | R |
| 38. | PL-3007 | R | S | R | R | S | MR | MR | R | MS | R | S | S | S | S | S | S | S |
| 39. | PL-3008(LB) | R | MS | R | R | MS | R | S | R | R | R | MS | MS | MS | MS | S | R | MS |
| 40. | PL-3009(LB) | R | R | R | R | R | MR | MR | MR | R | MR | S | S | S | S | S | MS | R |
| 41. | PL-3010 | MS | R | R | MR | MS | R | R | R | R | R | R | S | S | R | S | MX | R |
| 42. | UPB-1078 | R | R | R | R | R | R | R | R | R | R | MR | S | S | S | S | S | R |
| 43. | VLB-130 | R | R | R | R | R | MR | S | R | R | R | R | MS | MS | S | MS | R | R |
| 44. | VLB-164 | R | R | R | R | R | MR | MS | MR | R | R | R | MS | S | R | MS | S | S |

