**Table S 1**: Detail of amplification with different primers, resistance genes and resistance level under field trials of the different accessions.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Accession number** | **SCAR Markers** | | | | | | **Resistant gene** | **Disease score under field conditions on 1-9 scale** | | **Resistant score in field on 1-3 scale** |
| **SBA16** | **SN02** | **SM02** | **SAA19** | **TGA1.1570** | **pv-at006** | **2019** | **2020** |
| GFB-1 | - | - | - | + | - | - | *Phg-3* | 5.5 | 6.2 | 3 |
| GFB-2 | - | - | - | + | - | - | *Phg-3* | 4.5 | 5.0 | 2 |
| GFB-3 | - | - | - | - | - | - | NA | 6.5 | 7.0 | 3 |
| GFB-4 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 5.5 | 6.0 | 2 |
| GFB-5 | - | - | - | - | - | - | NA | 6.5 | 6.0 | 3 |
| GFB-6 | + | - | + | + | - | - | *Phg-3* | 4.0 | 4.0 | 2 |
| GFB-7 | - | - | + | - | - | - | *Phg-3* | 3.5 | 4.5 | 2 |
| GFB-8 | - | - | + | - | - | - | *Phg-3* | 4.0 | 4.5 | 2 |
| GFB-9 | + | - | + | - | - | - | *Phg-3* | 3.5 | 4.5 | 2 |
| GFB-10 | - | - | + | - | - | - | *Phg-3* | 6.5 | 7.0 | 3 |
| GFB-11 | - | - | - | + | - | - | *Phg-3* | 7.0 | 7.5 | 3 |
| GFB-12 | + | - | + | + | - | - | *Phg-3* | 2.5 | 3.0 | 1 |
| GFB-13 | - | - | - | - | - | - | NA | 6.5 | 6.0 | 3 |
| GFB-14 | - | - | - | - | - | - | NA | 7.0 | 8.0 | 3 |
| GFB-15 | - | - | + | + | - | - | *Phg-3* | 6.5 | 7.5 | 3 |
| GFB-16 | - | - | - | - | - | - | NA | 7.5 | 8.0 | 3 |
| GFB-17 | - | - | - | - | - | - | NA | 7.0 | 7.5 | 3 |
| GFB-18 | + | - | + | + | - | - | *Phg-3* | 4.5 | 5.0 | 2 |
| GFB-19 | - | + | + | - | - | - | *Phg-2*, *Phg-3* | 4.5 | 4.5 | 2 |
| GFB-20 | - | + | - | - | - | - | *Phg-2* | 7.5 | 8.0 | 3 |
| GFB-21 | - | - | + | + | - | - | *Phg-3* | 5.5 | 6.0 | 2 |
| GFB-22 | + | - | + | + | - | - | *Phg-3* | 4.5 | 5.0 | 2 |
| GFB-23 | - | + | - | - | - | - | *Phg-2* | 7.0 | 6.5 | 3 |
| GFB-24 | - | - | + | - | - | - | *Phg-3* | 7.5 | 6.0 | 3 |
| GFB-25 | - | + | + | + | + | + | *Phg-1,Phg-2*, *Phg-3,Phg-5* | 1.5 | 1.5 | 1 |
| GFB-26 | - | + | + | + | + | + | *Phg-1,Phg-2*, *Phg-3, Phg-5* | 2.0 | 1.5 | 1 |
| GFB-27 | - | - | + | - | - | - | *Phg-3* | 4.0 | 3.5 | 2 |
| GFB-28 | - | - | + | - | - | - | *Phg-3* | 4.5 | 5.5 | 2 |
| GFB-29 | - | - | + | + | - | - | *Phg-3* | 5.0 | 5.5 | 2 |
| GFB-30 | - | - | + | + | - | - | *Phg-3* | 2.5 | 2.0 | 1 |
| GFB-31 | - | - | + | - | - | - | *Phg-3* | 5.5 | 6.0 | 2 |
| GFB-32 | - | - | + | + | - | - | *Phg-3* | 1.5 | 1.0 | 1 |
| GFB-33 | - | - | + | + | - | - | *Phg-3* | 5.5 | 4.5 | 2 |
| GFB-34 | - | - | + | + | - | - | *Phg-3* | 4.5 | 5.0 | 2 |
| GFB-35 | - | - | + | - | + | + | *Phg-1, Phg-3, phg-5* | 1.0 | 1.5 | 1 |
| GFB-36 | - | - | + | - | - | - | *Phg-3* | 5.5 | 6.0 | 2 |
| GFB-37 | - | - | + | - | - | - | *Phg-3* | 8.5 | 8.5 | 3 |
| GFB-38 | - | - | + | - | - | - | *Phg-3* | 7.0 | 7.5 | 3 |
| GFB-39 | - | - | - | - | - | - | NA | 7.0 | 8.0 | 3 |
| GFB-40 | - | - | - | - | - | - | NA | 7.5 | 8.0 | 3 |
| GFB-41 | - | - | + | + | - | - | *Phg-3* | 8.0 | 7.5 | 3 |
| GFB-42 | - | - | + | - | - | - | *Phg-3* | 7.5 | 8.5 | 3 |
| GFB-43 | - | - | + | + | - | - | *Phg-3* | 7.0 | 8.5 | 3 |
| GFB-44 | - | - | + | + | - | - | *Phg-3* | 4.5 | 5.0 | 2 |
| GFB-45 | - | - | + | - | - | - | *Phg-3* | 5.5 | 5.0 | 2 |
| GFB-46 | - | - | + | + | - | - | *Phg-3* | 4.0 | 4.5 | 2 |
| GFB-47 | + | - | + | + | - | - | *Phg-3* | 5.0 | 5.0 | 2 |
| GFB-48 | - | - | - | - | - | - | NA | 8.5 | 9.0 | 3 |
| GFB-49 | - | - | - | - | - | - | NA | 8.0 | 8.5 | 3 |
| GFB-50 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 5.0 | 5.5 | 2 |
| GFB-51 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 4.0 | 3.5 | 2 |
| GFB-52 | - | + | + | - | - | - | *Phg-2*, *Phg-3* | 5.0 | 5.5 | 2 |
| GFB-53 | - | - | + | + | - | - | *Phg-3* | 5.0 | 6.0 | 2 |
| GFB-54 | - | + | - | - | - | - | *Phg-2* | 4.5 | 5.0 | 2 |
| GFB-55 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 2.5 | 3.0 | 1 |
| GFB-56 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 2.0 | 3.0 | 1 |
| GFB-57 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 6.0 | 5.5 | 2 |
| GFB-58 | - | + | - | + | - | - | *Phg-2*, *Phg-3* | 1.0 | 1.5 | 1 |
| GFB-59 | - | - | - | + | - | - | *Phg-3* | 6.0 | 6.0 | 2 |
| GFB-60 | - | + | - | - | - | - | *Phg-2* | 5.5 | 6.0 | 2 |
| GFB-61 | - | - | + | + | - | - | *Phg-3* | 5.5 | 6.0 | 2 |
| GFB-62 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 5.0 | 5.5 | 2 |
| GFB-63 | + | + | + | + | - | - | *Phg-2*, *Phg-3* | 1.5 | 2.5 | 1 |
| GFB-64 | + | - | + | + | - | - | *Phg-3* | 3.0 | 3.0 | 1 |
| GFB-65 | + | + | + | + | - | - | *Phg-2*, *Phg-3* | 3.0 | 3.0 | 1 |
| GFB-66 | - | - | + | + | - | - | *Phg-3* | 7.5 | 8.0 | 3 |
| GFB-67 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 4.5 | 5.5 | 2 |
| GFB-68 | - | + | - | - | - | - | *Phg-2* | 8.0 | 8.5 | 3 |
| GFB-69 | + | + | - | + | - | - | *Phg-2*, *Phg-3* | 5.5 | 5.0 | 2 |
| GFB-70 | - | + | - | + | - | - | *Phg-2*, *Phg-3* | 5.0 | 5.5 | 2 |
| GFB-71 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 4.5 | 4.5 | 2 |
| GFB-72 | - | - | + | + | - | - | *Phg-2*, *Phg-3* | 8.5 | 8.0 | 3 |
| GFB-73 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 2.5 | 2.5 | 1 |
| GFB-74 | + | + | + | + | + | - | *Phg-1, Phg-2*, *Phg-3* | 2.0 | 2.5 | 1 |
| GFB-75 | - | + | - | + | - | - | *Phg-2*, *Phg-3* | 4.5 | 5.0 | 2 |
| GFB-76 | + | - | + | - | - | - | *Phg-3* | 5.5 | 5.0 | 2 |
| GFB-77 | + | - | + | + | - | - | *Phg-2*, *Phg-3* | 5.0 | 4.5 | 2 |
| GFB-78 | - | + | + | + | - | - | *Phg-3* | 7.5 | 8.0 | 3 |
| GFB-79 | + | - | + | + | - | - | *Phg-3* | 6.0 | 5.5 | 2 |
| GFB-80 | - | - | + | + | - | - | *Phg-2*, *Phg-3* | 5.5 | 6.0 | 2 |
| GFB-81 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 4.5 | 5.0 | 2 |
| GFB-82 | + | - | + | + | - | - | *Phg-3* | 8.5 | 8.5 | 3 |
| GFB-83 | - | + | - | + | - | - | *Phg-2*, *Phg-3* | 5.0 | 5.5 | 2 |
| GFB-84 | + | - | + | - | - | - | *Phg-3* | 8.5 | 9.0 | 3 |
| GFB-85 | - | - | - | - | - | - | NA | 9.0 | 9.0 | 3 |
| GFB-86 | - | + | + | - | - | - | *Phg-2*, *Phg-3* | 5.5 | 5.5 | 2 |
| GFB-87 | - | - | - | - | - | - | NA | 8.5 | 8.0 | 3 |
| GFB-88 | - | + | - | - | - | - | *Phg-2* | 8.5 | 8.0 | 3 |
| GFB-89 | - | - | - | - | - | - | NA | 8.5 | 9.0 | 3 |
| GFB-90 | - | - | + | - | - | - | *Phg-3* | 8.0 | 8.5 | 3 |
| GFB-91 | - | - | - | - | - | - | NA | 7.5 | 8.0 | 3 |
| GFB-92 | - | - | - | - | - | - | NA | 7.5 | 8.0 | 3 |
| GFB-93 | + | + | + | + | - | - | *Phg-2*, *Phg-3* | 0.5 | 0.5 | 1 |
| GFB-94 | - | + | - | - | - | - | NA | 5.5 | 6.0 | 2 |
| GFB-95 | - | - | + | - | - | - | *Phg-3* | 5.0 | 5.5 | 2 |
| GFB-96 | - | - | - | - | - | - | *Phg-3* | 7.5 | 8.0 | 3 |
| GFB-97 | + | + | + | + | - | - | *Phg-3* | 0.5 | 0.5 | 1 |
| GFB-98 | - | - | - | - | - | - | *Phg-3* | 5.5 | 5.0 | 2 |
| GFB-99 | - | - | + | - | - | - | *Phg-3* | 6.0 | 5.5 | 2 |
| GFB-100 | - | - | - | - | - | - | NA | 8.5 | 9.0 | 3 |
| GFB-101 | - | + | - | - | - | - | *Phg-2* | 4.5 | 4.5 | 2 |
| GFB-102 | - | - | + | - | + | - | *Phg-1, Phg-3* | 1.5 | 2.0 | 1 |
| GFB-103 | - | - | - | + | - | - | *Phg-3* | 7.5 | 8.0 | 3 |
| GFB-104 | - | + | + | - | - | - | *Phg-2*, *Phg-3* | 4.5 | 5.0 | 2 |
| GFB-105 | - | + | - | - | - | - | *Phg-2*, *Phg-3* | 4.5 | 4.0 | 2 |
| GFB-106 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 4.0 | 3.5 | 2 |
| GFB-107 | - | - | - | - | - | - | NA | 6.0 | 5.5 | 2 |
| GFB-108 | - | - | - | + | - | - | *Phg-3* | 8.5 | 9.0 | 3 |
| GFB-109 | - | - | - | + | - | - | *Phg-3* | 7.5 | 8.0 | 3 |
| GFB-110 | - | - | - | + | - | - | *Phg-3* | 4.5 | 5.5 | 2 |
| GFB-111 | + | + | - | + | - | - | *Phg-2*, *Phg-3* | 4.5 | 5.5 | 2 |
| GFB-112 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 4.5 | 4.5 | 2 |
| GFB-113 | - | + | + | - | - | - | *Phg-2*, *Phg-3* | 5.0 | 5.0 | 2 |
| GFB-114 | - | + | - | + | - | - | *Phg-2*, *Phg-3* | 5.0 | 5.5 | 2 |
| GFB-115 | - | + | - | - | - | - | *Phg-2* | 5.0 | 5.5 | 2 |
| GFB-116 | - | - | - | + | - | - | *Phg-3* | 4.0 | 4.5 | 2 |
| GFB-117 | - | - | - | - | - | - | NA | 4.0 | 5.0 | 2 |
| GFB-118 | - | - | + | - | - | - | *Phg-3* | 7.5 | 8.0 | 3 |
| GFB-119 | - | - | - | - | - | - | NA | 5.0 | 5.5 | 2 |
| GFB-120 | - | - | + | + | - | - | *Phg-3* | 4.0 | 4.5 | 2 |
| GFB-121 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 5.5 | 6.0 | 2 |
| GFB-122 | - | + | - | - | - | - | *Phg-2* | 6.5 | 7.0 | 3 |
| GFB-123 | - | - | - | + | - | - | *Phg-3* | 7.5 | 7.0 | 3 |
| GFB-124 | - | + | - | + | - | - | *Phg-2*, *Phg-3* | 3.5 | 4.0 | 2 |
| GFB-125 | - | - | - | + | - | - | *Phg-3* | 3.5 | 3.5 | 2 |
| GFB-126 | - | + | - | + | - | - | *Phg-2*, *Phg-3* | 4.0 | 4.0 | 2 |
| GFB-127 | - | + | - | + | - | - | *Phg-2*, *Phg-3* | 5.0 | 5.5 | 2 |
| GFB-128 | - | - | - | + | - | - | *Phg-3* | 1.5 | 2.0 | 1 |
| GFB-129 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 5.0 | 5.0 | 2 |
| GFB-130 | - | + | - | + | - | - | *Phg-2*, *Phg-3* | 5.0 | 5.5 | 2 |
| GFB-131 | - | - | - | - | - | - | NA | 5.5 | 5.0 | 2 |
| GFB-132 | - | - | - | - | - | - | NA | 5.5 | 5.5 | 2 |
| GFB-133 | + | - | - | - | - | - | *Phg-3* | 6.0 | 5.5 | 2 |
| GFB-134 | - | - | + | - | - | - | *Phg-3* | 7.5 | 8.0 | 3 |
| GFB-135 | - | - | - | - | - | - | NA | 4.5 | 5.0 | 2 |
| GFB-136 | - | - | - | + | - | - | *Phg-3* | 1.5 | 2.0 | 1 |
| GFB-137 | - | + | - | - | - | - | *Phg-2* | 7.5 | 8.0 | 3 |
| GFB-138 | - | - | - | - | - | - | NA | 6.5 | 7.0 | 3 |
| GFB-139 | - | - | - | - | - | - | NA | 6.0 | 6.5 | 2 |
| GFB-140 | - | - | - | - | - | - | NA | 4.5 | 5.0 | 2 |
| GFB-141 | - | - | - | - | - | - | NA | 4.5 | 4.5 | 2 |
| GFB-142 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 4.5 | 5.0 | 2 |
| GFB-143 | - | - | - | + | - | - | *Phg-3* | 5.0 | 5.5 | 2 |
| GFB-144 | + | - | + | + | - | - | *Phg-3* | 7.5 | 7.0 | 3 |
| GFB-145 | - | - | - | + | - | - | *Phg-3* | 8.5 | 8.5 | 3 |
| GFB-146 | - | - | - | + | - | - | *Phg-3* | 7.0 | 7.0 | 3 |
| GFB-147 | - | - | - | - | - | - | NA | 7 | 8.0 | 3 |
| GFB-148 | - | + | + | + | - | - | *Phg-2*, *Phg-3* | 5.5 | 6.0 | 2 |
| GFB-149 | + | - | + | + | - | - | *Phg-3* | 5.0 | 5.5 | 2 |
| GFB-150 | + | - | + | - | - | - | *Phg-3* | 5.5 | 6.0 | 2 |
| GFB-151 | - | - | - | + | - | - | *Phg-3* | 8.0 | 8.5 | 3 |
| GFB-152 | + | - | + | + | - | - | *Phg-3* | 6.0 | 6.0 | 2 |
| GFB-153 | - | - | - | - | - | - | NA | 6.0 | 6.0 | 2 |
| GFB-154 | - | - | - | - | - | - | NA | 8.5 | 9.0 | 3 |
| GFB-155 | - | + | + | - | - | - | *Phg-2*, *Phg-3* | 5.5 | 6.0 | 2 |
| GFB-156 | - | - | + | + | - | - | *Phg-3* | 6.0 | 6.0 | 2 |
| GFB-157 | + | - | + | + | + | - | *Phg-1,Phg-3* | 4.5 | 5.0 | 2 |
| GFB-158 | - | - | + | - | - | - | *Phg-2* | 8.5 | 9.0 | 3 |
| GFB-159 | - | - | + | - | - | - | *Phg-3* | 8.5 | 8.5 | 3 |
| GFB-160 | - | - | + | - | - | - | *Phg-3* | 3.5 | 4.0 | 2 |
| GFB-161 | - | - | + | - | - | - | *Phg-3* | 2.5 | 3.0 | 2 |
| GFB-162 | - | - | + | - | - | - | *Phg-3* | 4.0 | 4.0 | 2 |
| GFB-163 | - | - | + | - | - | + | *Phg-3, Phg-5* | 5.5 | 5.5 | 2 |
| GFB-164 | - | - | + | - | - | - | *Phg-3* | 6.5 | 7.0 | 3 |
| GFB-165 | - | - | - | - | - | - | NA | 7.5 | 7.0 | 3 |
| GFB-166 | + | - | + | + | - | - | *Phg-3* | 5.5 | 5.5 | 2 |
| GFB-167 | - | - | - | - | - | - | NA | 8.5 | 8.0 | 3 |
| GFB-168 | - | - | - | - | - | - | NA | 7.5 | 7.5 | 3 |
| GFB-169 | + | + | + | + | - | - | *Phg-3* | 5.5 | 5.5 | 2 |
| GFB-170 | + | + | + | + | - | - | *Phg-2*, *Phg-3* | 4.5 | 4.5 | 2 |
| GFB-171 | - | + | - | + | - | - | *Phg-2*, *Phg-3* | 5.5 | 5.0 | 2 |
| GFB-172 | - | - | - | + | - | - | *Phg-3* | 7.5 | 7.5 | 3 |
| GFB-173 | - | + | - | - | - | - | *Phg-2* | 8.0 | 8.5 | 3 |
| GFB-174 | - | + | - | + | - | - | *Phg-2*, *Phg-3* | 5.5 | 5.5 | 2 |
| GFB-175 | - | + | + | - | - | - | *Phg-2*, *Phg-3* | 6.0 | 5.5 | 2 |
| GFB-176 | - | + | - | - | - | - | *Phg-2* | 5.0 | 4.5 | 2 |
| Cornell 49-242 | + | + | + | + | + | + | *Phg-1, Phg-2*, *Phg-3,* | 0.2 | 0.3 | 1 |
|  |  |  |  |  |  |  | Mean | 5.48 | 5.63 |  |
|  |  |  |  |  |  |  | Std.dev. | 1.92 | 1.95 |  |
|  |  |  |  |  |  |  | Std.error | 0.14 | 0.15 |  |

+ -gene is present, - gene is not present. 1, 2 and 3 are resistance level of the different French bean accessions under field condition. 1 -Resistant, 2 - moderately resistant and 3 - susceptible accessions.