

Appendix

Appendix Table 1. Details of 50 blast isolates used for preliminary screening on parental set

| No. | Isolate code | Host cultivar | Plant part | District | No. | Isolate code | Host cultivar | Plant part | District |
|-----|--------------|---------------|------------|-------------|-----|--------------|--------------------|------------|-------------|
| 1 | LPDR 02 | Rice: CR 203 | collar | Champhone | 26 | LPDR 38 | Rice: CR 203 | neck | Champhone |
| 2 | LPDR 03 | Rice: CR 203 | neck | Champhone | 27 | LPDR 39 | Rice: CR 203 | neck | Champhone |
| 3 | LPDR 04 | Unknown | panicle | Champhone | 28 | LPDR 41 | Unknown | neck | Champhone |
| 4 | LPDR 06 | Rice: RD 10 | collar | Khanthabuly | 29 | LPDR 43 | Unknown | neck | Champhone |
| 5 | LPDR 08 | Rice: RD 10 | panicle | Khanthabuly | 30 | LPDR 44 | Rice: RD10 | leaf | Champhone |
| 6 | LPDR 09 | Rice: TDK 1 | panicle | Khanthabuly | 31 | LPDR 45 | Rice: RD 10 | neck | Champhone |
| 7 | LPDR 10 | Rice: TDK 1 | seed | Khanthabuly | 32 | LPDR 47 | Rice: RD 10 | leaf | Champhone |
| 8 | LPDR 11 | Rice: TDK 1 | panicle | Khanthabuly | 33 | LPDR 48 | Rice: RD 10 | neck | Champhone |
| 9 | LPDR 12 | Rice: TSN 1 | panicle | Champhone | 34 | LPDR 49 | Rice: TDK 1 | neck | Xayphuthong |
| 10 | LPDR 13 | Rice: TSN 1 | neck | Champhone | 35 | LPDR 50 | Rice: TDK 1 | neck | Xayphuthong |
| 11 | LPDR 14 | Rice: CR 203 | neck | Xonbuly | 36 | LPDR 52 | Rice: TDK 1 | neck | Xayphuthong |
| 12 | LPDR 15 | Rice: CR 203 | neck | Xonbuly | 37 | LPDR53 | W: Panicum repense | leaf | Xaybuly |
| 13 | LPDR 16 | Rice: TDK 1 | neck | Xonbuly | 38 | LPDR 55 | W: Panicum repense | leaf | Xaybuly |
| 14 | LPDR 17 | Rice: TDK 1 | panicle | Xonbuly | 39 | LPDR 56 | W: Panicum repense | leaf | Xaybuly |
| 15 | LPDR 18 | Rice: TDK 1 | collar | Xonbuly | 40 | LPDR 57 | W: Panicum repense | leaf | Xaybuly |
| 16 | LPDR 19 | Rice: TDK 1 | collar | Xayphuthong | 41 | LPDR 58 | W: Panicum repense | leaf | Xaybuly |
| 17 | LPDR 21 | Rice: RD 10 | neck | Khanthabuly | 42 | LPDR 59 | W: Panicum repense | leaf | Xaybuly |
| 18 | LPDR 23 | Rice: TSN 1 | neck | Champhone | 43 | LPDR 63 | Unknown | leaf | Champhone |
| 19 | LPDR 24 | Rice: CR 203 | neck | Xonbuly | 44 | LPDR 64 | Unknown | leaf | Champhone |
| 20 | LPDR 26 | Rice: TDK 1 | neck | Xonbuly | 45 | LPDR 65 | Unknown | panicle | Champhone |
| 21 | LPDR 28 | Rice: TDK 1 | neck | Xayphuthong | 46 | LPDR 66 | Rice: CR 203 | leaf | Xonbuly |
| 22 | LPDR 30 | Rice: CR 203 | collar | Champhone | 47 | LPDR 67 | Rice: CR 203 | collar | Xonbuly |
| 23 | LPDR 31 | Rice: CR 203 | collar | Champhone | 48 | LPDR 69 | W: Panicum repense | leaf | Xaybuly |
| 24 | LPDR 35 | Unknown | neck | Champhone | 49 | LPDR 70 | W: Panicum repense | leaf | Xaybuly |
| 25 | LPDR 36 | Unknown | neck | Champhone | 50 | LPDR 71 | Rice: TDK 1 | neck | Xaybuly |

Appendix Table 2. Details of 22 and 5 selected isolates from Thailand used for parental lines and test varieties

| No. | Isolate code | Sample envelop | Sampling date | Host cultivar | Plant part | District | Province | Region |
|-----|--------------|----------------|---------------|-----------------------|------------|-------------|-------------|---------------|
| 1 | LPDR 02 | SCH 1.2.2c | 4/15/2004 | Rice: CR 203 | collar | Champhone | Savanakhet | Centre |
| 2 | LPDR 04 | SCH 1.3.3p | 4/15/2004 | Unknown | panicle | Champhone | Savanakhet | Centre |
| 3 | LPDR 06 | SKH 2.1.3c | 4/16/2004 | Rice: RD 10 | collar | Khanthabuly | Savanakhet | Centre |
| 4 | LPDR 08 | SKH 2.1.1p | 4/16/2004 | Rice: RD 10 | panicle | Khanthabuly | Savanakhet | Centre |
| 5 | LPDR 10 | SKH 3.1.2s | 4/16/2004 | Rice: TDK 1 | seed | Khanthabuly | Savanakhet | Centre |
| 6 | LPDR 13 | SCH 8.1.3n | 4/17/2004 | Rice: TSN 1 | neck | Champhone | Savanakhet | Centre |
| 7 | LPDR 14 | SXN 9.1.2n | 4/17/2004 | Rice: CR 203 | neck | Xonbuly | Savanakhet | Centre |
| 8 | LPDR 16 | SXN 10.1.1n | 4/18/2004 | Rice: TDK 1 | neck | Xonbuly | Savanakhet | Centre |
| 9 | LPDR 17 | SXN 10.1.2p | 4/18/2004 | Rice: TDK 1 | panicle | Xonbuly | Savanakhet | Centre |
| 10 | LPDR 19 | SXT 12.4.1c | 4/20/2004 | Rice: TDK 1 | collar | Xayphuthong | Savanakhet | Centre |
| 11 | LPDR 21 | SKH 2.1.5n | 4/16/2004 | Rice: RD 10 | neck | Khanthabuly | Savanakhet | Centre |
| 12 | LPDR 30 | SCH 1.1.2c | 4/15/2004 | Rice: CR 203 | collar | Champhone | Savanakhet | Centre |
| 13 | LPDR 35 | SCH 1.4.3n | 4/15/2004 | Unknown | neck | Champhone | Savanakhet | Centre |
| 14 | LPDR 38 | SCH 1.6.2n | 4/15/2004 | Rice: CR 203 | neck | Champhone | Savanakhet | Centre |
| 15 | LPDR 41 | SCH 7.1.1n | 4/17/2004 | Unknown | neck | Champhone | Savanakhet | Centre |
| 16 | LPDR 43 | SCH 7.1.4n | 4/17/2004 | Unknown | neck | Champhone | Savanakhet | Centre |
| 17 | LPDR 47 | SCH 8.3.3l | 4/17/2004 | Rice: RD 10 | leaf | Champhone | Savanakhet | Centre |
| 18 | LPDR 50 | SXT 12.5.2n | 4/18/2004 | Rice: TDK 1 | neck | Xayphuthong | Savanakhet | Centre |
| 19 | LPDR 63 | SCH 1.3.4l | 4/15/2004 | Unknown | leaf | Champhone | Savanakhet | Centre |
| 20 | LPDR 65 | SCH 1.6.5p | 4/15/2004 | Rice: CR 203 | panicle | Champhone | Savanakhet | Centre |
| 21 | LPDR 67 | SXN 10.1.5c | 4/18/2004 | Rice: TDK 1 | collar | Xonbuly | Savanakhet | Centre |
| 22 | LPDR 71 | SXB 16.1.1n | 4/19/2004 | Rice: TDK 1 | neck | Xaybuly | Savanakhet | Centre |
| 1 | THL318 | | | Rice: Salumpikit | leaf | | Chiang Mai | Northern |
| 2 | THL191 | | | Rice: Sinna Sivapu | leaf | | Phitsanulok | Northern |
| 3 | THL557 | | | Rice: SPR90 | neck | | Tak | Northern |
| 4 | THL899 | | | Rice: 'Khao Pattalung | collar | | Suratthani | Southern |
| 5 | TH16 | | | Barley | seed | | Khon Kaen | North-eastern |

Appendix Table 3. Preliminary screening for leaf blast resistance on parental set

| No. | Isolate | Spore/ml. | KDML 105 | | | JHN | | | No. | Isolate | Spore/ml. | KDML 105 | | | JHN | | |
|-----|---------|-----------|---------------------|---------------------|-----|---------------------|---------------------|-----|-----|---------|-----------|---------------------|---------------------|-----|---------------------|---------------------|-----|
| | | | 1 st Rep | 2 nd Rep | Av | 1 st Rep | 2 nd Rep | Av | | | | 1 st Rep | 2 nd Rep | Av | 1 st Rep | 2 nd Rep | Av |
| 1 | LPDR 02 | 50,000 | 2.1 | 2.3 | 2.2 | 0.1 | 0.2 | 0.2 | 26 | LPDR 38 | 50,000 | 2.5 | 2.5 | 2.5 | 0.1 | 0.2 | 0.2 |
| 2 | LPDR 03 | 50,000 | 3.7 | 3.1 | 3.4 | 0.2 | 0.1 | 0.2 | 27 | LPDR 39 | 50,000 | 1.1 | 1.5 | 1.3 | 0.3 | 0 | 0.2 |
| 3 | LPDR 04 | 50,000 | 4.2 | 4.2 | 4.2 | 0.1 | 0.5 | 0.3 | 28 | LPDR 41 | 50,000 | 4.5 | 3.5 | 4.0 | 0.4 | 0.3 | 0.4 |
| 4 | LPDR 06 | 45,000 | 5 | 4.6 | 4.8 | 0.8 | 0.4 | 0.6 | 29 | LPDR 43 | 50,000 | 4.3 | 4 | 4.2 | 0.5 | 0.5 | 0.5 |
| 5 | LPDR 08 | 50,000 | 5.9 | 6 | 6.0 | 0.2 | 0.1 | 0.2 | 30 | LPDR 44 | 50,000 | 2.3 | 2.3 | 2.3 | 0 | 0 | 0.0 |
| 6 | LPDR 09 | 50,000 | 1.1 | 0.9 | 1.0 | 0 | 0 | 0.0 | 31 | LPDR 45 | 50,000 | 1.7 | 1.7 | 1.7 | 0.1 | 0.25 | 0.2 |
| 7 | LPDR 10 | 47,000 | 1.3 | 0.7 | 1.0 | 0 | 0 | 0.0 | 32 | LPDR 47 | 50,000 | 3.70 | 3.30 | 3.5 | 0.20 | 0.30 | 0.3 |
| 8 | LPDR 11 | 50,000 | 0.5 | | 0.5 | 0 | | 0.0 | 33 | LPDR 48 | 50,000 | 2.7 | 2.2 | 2.5 | 0.1 | 0.2 | 0.2 |
| 9 | LPDR 12 | 50,000 | 4.3 | 3.8 | 4.1 | 0 | 0.2 | 0.1 | 34 | LPDR 49 | 45,000 | 2.4 | 2.4 | 2.4 | 0 | 0 | 0.0 |
| 10 | LPDR 13 | 49,000 | 4.9 | 4.7 | 4.8 | 0.3 | 0.2 | 0.3 | 35 | LPDR 50 | 50,000 | 4.7 | 4.1 | 4.4 | 0.5 | 0.4 | 0.5 |
| 11 | LPDR 14 | 50,000 | 2.9 | 2.8 | 2.9 | 0.3 | 0.2 | 0.3 | 36 | LPDR 52 | 50,000 | 2.5 | 2.6 | 2.6 | 0.1 | 0.1 | 0.1 |
| 12 | LPDR 15 | 50,000 | 2.1 | 2.1 | 2.1 | 0 | 0 | 0.0 | 37 | LPDR 55 | 50,000 | 1.3 | 1.3 | 1.3 | 0.1 | 0.1 | 0.1 |
| 13 | LPDR 16 | 50,000 | 5.8 | 5.5 | 5.7 | 0.5 | 0.1 | 0.3 | 38 | LPDR 56 | 50,000 | 1.4 | 1.5 | 1.5 | 0.2 | 0.2 | 0.2 |
| 14 | LPDR 17 | 50,000 | 4.5 | 3.7 | 4.1 | 0.3 | 0.4 | 0.4 | 39 | LPDR 57 | 50,000 | 0.5 | 0.5 | 0.5 | 0 | 0 | 0.0 |
| 15 | LPDR 18 | 50,000 | 3.5 | 3.9 | 3.7 | 0 | 0.2 | 0.1 | 40 | LPDR 58 | 50,000 | 0.7 | 0.8 | 0.8 | 0.2 | 0.2 | 0.2 |
| 16 | LPDR 19 | 50,000 | 4.7 | 4.5 | 4.6 | 0.5 | 0.15 | 0.3 | 41 | LPDR 59 | 46,000 | 2.9 | 2.3 | 2.6 | 1.8 | 0.6 | 1.2 |
| 17 | LPDR 21 | 50,000 | 4.4 | 4.6 | 4.5 | 0.1 | 0.1 | 0.1 | 42 | LPDR 63 | 50,000 | 4.1 | 4.1 | 4.1 | 0.2 | 0.3 | 0.3 |
| 18 | LPDR 23 | 50,000 | 4 | 3.8 | 3.9 | 0.4 | 0.4 | 0.4 | 43 | LPDR 64 | 50,000 | 1.9 | 1.7 | 1.8 | 0 | 0.1 | 0.1 |
| 19 | LPDR 24 | 50,000 | 2.9 | 2.3 | 2.6 | 0 | 0 | 0.0 | 44 | LPDR 65 | 50,000 | 1.5 | 0.7 | 1.1 | 0 | 0 | 0.0 |
| 20 | LPDR 26 | 50,000 | 4.8 | 4.6 | 4.7 | 0.3 | 0.1 | 0.2 | 45 | LPDR 66 | 50,000 | 4.5 | 4 | 4.3 | 1.6 | 0.6 | 1.1 |
| 21 | LPDR 28 | 50,000 | 4.1 | 3.9 | 4.0 | 0.2 | 0 | 0.1 | 46 | LPDR 67 | 50,000 | 6 | 6 | 6.0 | 0.6 | 0.4 | 0.5 |
| 22 | LPDR 30 | 50,000 | 3.2 | 2.9 | 3.1 | 0.2 | 0.1 | 0.2 | 47 | LPDR 69 | 46,000 | 0.7 | 1.4 | 1.1 | 0.2 | 0.2 | 0.2 |
| 23 | LPDR 31 | 50,000 | 2.9 | 3.3 | 3.1 | 0.2 | 0.5 | 0.4 | 48 | LPDR 71 | 48,000 | 5.7 | 4.1 | 4.9 | 0.5 | 0 | 0.3 |
| 24 | LPDR 35 | 50,000 | 5.7 | 5.4 | 5.6 | 0.6 | 0.7 | 0.7 | 49 | LPDR 71 | 50,000 | 1.5 | 1.7 | 1.6 | 0 | 0 | 0.0 |
| 25 | LPDR 36 | 50,000 | 3.8 | 3.9 | 3.9 | 0.3 | 0.5 | 0.4 | 50 | LPDR53 | 50,000 | 1.6 | 1.7 | 1.7 | 0.1 | 0.1 | 0.1 |

Appendix Table 4. Disease severity index of 32 test varieties were inoculated with 22 & 5 selected isolates from Thailand

| No. | Variety | Rice blast isolates "LPDR" | | | | | | | | | | | | | | | | | | | | Rice blast isolates "THL" | | | | | | |
|-----|---------|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------------------|------|------|------|------|------|------|
| | | 2 | 4 | 6 | 8 | 10 | 13 | 14 | 16 | 17 | 19 | 21 | 30 | 35 | 38 | 41 | 43 | 47 | 50 | 63 | 65 | 67 | 71 | 16 | 899 | 191 | 318 | 557 |
| 1 | TDK1 | 1.4 | 2.4 | 0.6 | 1.5 | 3.0 | 1.4 | 2.1 | 5.0 | 0.5 | 0.7 | 0.1 | 0.5 | 0.5 | 1.2 | 0.6 | 0.8 | 0.4 | 2.4 | 1.1 | 1.2 | 4.5 | 2.5 | 3.5 | 3.4 | 1.4 | 1.4 | 3.4 |
| 2 | TDK3 | 1.2 | 4.4 | 2.8 | 3.8 | 0.0 | 4.3 | 3.1 | 5.3 | 5.2 | 3.8 | 2.8 | 1.6 | 5.2 | 1.4 | 2.6 | 3.0 | 0.8 | 3.6 | 3.1 | 0.4 | 3.9 | 4.6 | 4.3 | 5.4 | 1.2 | 1.2 | 4.3 |
| 3 | BL2 | 1.6 | 5.1 | 3.9 | 4.4 | 1.2 | 5.1 | 2.5 | 5.3 | 5.6 | 4.6 | 3.6 | 1.7 | 5.6 | 1.7 | 2.5 | 3.4 | 0.5 | 4.1 | 4.1 | 1.0 | 4.5 | 5.4 | 4.9 | 3.5 | 1.6 | 1.6 | 3.7 |
| 4 | TDK5 | 3.0 | 4.5 | 4.1 | 4.3 | 0.3 | 5.2 | 3.5 | 4.9 | 4.8 | 4.1 | 3.2 | 2.6 | 4.8 | 0.9 | 2.1 | 3.3 | 5.2 | 3.8 | 3.5 | 3.1 | 4.3 | 4.7 | 4.5 | 2.9 | 3.0 | 3.0 | 3.5 |
| 5 | TDK6 | 0.2 | 5.1 | 4.4 | 5.0 | 0.0 | 5.4 | 3.1 | 4.6 | 5.4 | 5.2 | 3.9 | 0.4 | 5.4 | 2.4 | 2.1 | 3.3 | 0.1 | 4.3 | 4.1 | 1.0 | 4.1 | 5.4 | 4.8 | 3.1 | 0.2 | 0.2 | 3.0 |
| 6 | TDK7 | 0.2 | 5.2 | 4.5 | 5.0 | 0.0 | 5.5 | 3.2 | 5.6 | 5.6 | 5.4 | 3.6 | 0.6 | 5.6 | 2.4 | 2.9 | 3.1 | 0.4 | 4.8 | 3.6 | 2.1 | 4.1 | 5.4 | 4.7 | 3.2 | 0.2 | 0.2 | 3.3 |
| 7 | TDK8 | 1.4 | 4.6 | 3.6 | 4.6 | 1.9 | 4.9 | 3.4 | 5.5 | 5.6 | 4.5 | 3.5 | 0.6 | 5.6 | 3.0 | 0.1 | 3.0 | 0.5 | 4.1 | 3.5 | 0.5 | 3.6 | 4.8 | 4.2 | 3.3 | 1.4 | 1.4 | 3.4 |
| 8 | TDK9 | 1.0 | 0.4 | 0.4 | 1.7 | 3.1 | 3.2 | 1.9 | 5.0 | 2.3 | 0.6 | 0.3 | 1.9 | 2.3 | 1.6 | 0.2 | 0.7 | 0.4 | 2.8 | 1.9 | 0.4 | 4.1 | 0.4 | 2.3 | 2.8 | 1.0 | 1.0 | 3.4 |
| 9 | TDK10 | 0.4 | 5.1 | 4.2 | 4.1 | 0.8 | 4.8 | 3.4 | 5.0 | 5.5 | 4.6 | 3.6 | 0.9 | 5.5 | 2.2 | 2.6 | 3.1 | 1.8 | 4.0 | 3.8 | 0.3 | 3.6 | 5.3 | 4.5 | 3.3 | 0.4 | 0.4 | 2.9 |
| 10 | TSN1 | 0.2 | 4.9 | 4.1 | 4.6 | 0.2 | 5.4 | 3.1 | 5.2 | 5.6 | 5.7 | 3.5 | 0.6 | 5.6 | 0.4 | 2.9 | 3.6 | 0.1 | 4.1 | 3.9 | 0.1 | 3.7 | 5.6 | 4.6 | 3.0 | 0.2 | 0.2 | 2.9 |
| 11 | TSN3 | 0.4 | 0.9 | 2.1 | 0.8 | 3.1 | 1.9 | 0.2 | 4.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 1.1 | 0.2 | 0.1 | 0.2 | 2.0 | 2.9 | 0.4 | 3.9 | 1.0 | 2.5 | 3.4 | 0.4 | 0.4 | 3.0 |
| 12 | PNG1 | 1.3 | 5.2 | 3.8 | 4.1 | 0.0 | 5.0 | 2.2 | 5.5 | 4.8 | 4.3 | 3.3 | 0.9 | 4.8 | 1.2 | 3.1 | 2.9 | 0.9 | 4.2 | 4.0 | 0.9 | 4.0 | 5.5 | 4.7 | 3.4 | 1.3 | 1.3 | 3.1 |
| 13 | PNG3 | 0.8 | 3.8 | 2.9 | 3.2 | 0.2 | 4.5 | 0.2 | 3.8 | 3.5 | 3.5 | 2.0 | 0.2 | 3.5 | 1.9 | 1.8 | 0.9 | 0.3 | 3.6 | 3.5 | 0.4 | 2.3 | 3.8 | 3.1 | 3.8 | 0.8 | 0.8 | 3.5 |
| 14 | PNG4 | 0.1 | 0.6 | 3.4 | 1.4 | 0.3 | 3.6 | 0.4 | 4.7 | 1.1 | 1.9 | 1.8 | 0.0 | 1.1 | 0.2 | 1.3 | 0.0 | 1.4 | 2.9 | 2.0 | 0.4 | 2.4 | 0.9 | 1.6 | 4.1 | 0.1 | 0.1 | 2.8 |
| 15 | PNG5 | 0.0 | 5.4 | 4.2 | 3.9 | 0.0 | 5.4 | 2.9 | 5.4 | 6.0 | 4.5 | 3.1 | 0.2 | 6.0 | 3.4 | 1.6 | 1.9 | 0.3 | 4.2 | 3.4 | 0.2 | 3.9 | 5.5 | 4.7 | 3.6 | 0.0 | 0.0 | 2.7 |
| 16 | PNG6 | 0.4 | 0.1 | 0.7 | 2.2 | 1.3 | 3.3 | 1.1 | 4.7 | 1.1 | 0.2 | 2.3 | 0.4 | 1.1 | 1.7 | 0.7 | 1.0 | 2.0 | 1.9 | 2.0 | 0.4 | 3.5 | 0.2 | 1.8 | 4.8 | 0.4 | 0.4 | 4.5 |
| 17 | BL1 | 1.1 | 4.4 | 3.5 | 3.8 | 0.7 | 4.8 | 2.9 | 5.1 | 5.5 | 4.1 | 3.4 | 0.2 | 5.5 | 2.1 | 2.1 | 3.4 | 0.1 | 4.0 | 3.7 | 0.2 | 3.4 | 4.6 | 4.0 | 5.1 | 1.1 | 1.1 | 4.8 |
| 18 | BL6 | 1.9 | 0.2 | 0.7 | 1.4 | 3.4 | 2.2 | 1.6 | 5.1 | 0.1 | 0.9 | 2.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.2 | 3.6 | 2.3 | 0.0 | 3.8 | 0.4 | 2.1 | 5.4 | 1.9 | 1.9 | 4.3 |
| 19 | KK2 | 1.1 | 4.9 | 3.7 | 3.6 | 0.4 | 4.9 | 1.6 | 4.9 | 5.4 | 3.8 | 2.8 | 0.3 | 5.4 | 0.4 | 0.6 | 2.7 | 0.0 | 4.3 | 3.6 | 0.5 | 3.5 | 5.2 | 4.4 | 2.9 | 1.1 | 1.1 | 3.5 |
| 20 | KK11 | 0.7 | 4.9 | 3.9 | 3.9 | 0.2 | 4.8 | 2.2 | 5.1 | 5.7 | 4.1 | 3.6 | 0.6 | 5.7 | 0.6 | 2.8 | 3.1 | 0.0 | 3.7 | 4.0 | 0.2 | 3.6 | 5.2 | 4.4 | 5.5 | 0.7 | 0.7 | 5.1 |
| 21 | KK12 | 0.3 | 4.9 | 3.8 | 4.0 | 0.4 | 4.1 | 1.4 | 4.4 | 5.7 | 4.3 | 3.1 | 0.6 | 5.7 | 0.8 | 2.2 | 1.6 | 0.0 | 3.5 | 4.0 | 0.2 | 3.4 | 5.4 | 4.4 | 3.3 | 0.3 | 0.3 | 2.7 |
| 22 | LNTN1 | 0.2 | 5.1 | 4.2 | 4.7 | 0.0 | 4.8 | 2.9 | 4.4 | 5.4 | 5.0 | 3.6 | 0.1 | 5.4 | 3.1 | 3.0 | 2.0 | 0.6 | 3.8 | 4.0 | 1.1 | 4.2 | 5.3 | 4.7 | 3.0 | 0.2 | 0.2 | 2.6 |
| 23 | NTN1 | 0.8 | 5.0 | 0.7 | 0.9 | 0.4 | 1.0 | 0.2 | 4.5 | 5.5 | 0.2 | 0.4 | 0.9 | 5.5 | 0.8 | 2.2 | 3.5 | 0.6 | 1.4 | 1.8 | 1.2 | 2.8 | 5.3 | 4.0 | 5.8 | 0.8 | 0.8 | 5.4 |
| 24 | CR203 | 4.1 | 4.9 | 4.4 | 4.4 | 1.2 | 5.1 | 3.6 | 4.8 | 4.5 | 4.4 | 3.1 | 4.5 | 4.5 | 4.1 | 1.7 | 3.6 | 4.6 | 4.2 | 3.6 | 2.8 | 4.3 | 5.2 | 4.8 | 3.3 | 4.1 | 4.1 | 3.5 |
| 25 | LyDaw | 5.6 | 2.6 | 3.1 | 4.1 | 0.9 | 4.1 | 4.4 | 5.6 | 3.9 | 3.6 | 3.2 | 5.1 | 3.9 | 4.3 | 1.5 | 3.1 | 5.4 | 3.9 | 2.6 | 5.0 | 4.1 | 3.0 | | | 5.5 | 5.5 | |
| 26 | KDML105 | 3.9 | 4.8 | 4.4 | 4.6 | 1.6 | 4.4 | 4.1 | 5.3 | 5.8 | 4.2 | 3.8 | 2.3 | 5.8 | 2.4 | 3.2 | 4.1 | 2.7 | 4.0 | 4.0 | 1.9 | 4.4 | 5.2 | 4.8 | 5.5 | 3.9 | 3.9 | 5.5 |
| 27 | JHN | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.3 | 0.2 | 0.4 | 0.6 | 0.0 | 0.1 | 0.0 | 0.6 | 0.0 | 0.0 | 0.2 | 0.0 | 1.0 | 0.4 | 0.0 | 0.2 | 0.1 | 0.2 | 0.5 | 0.0 | 0.0 | 1.3 |
| 28 | CT9993 | 0.3 | 0.0 | 0.1 | 0.4 | 0.1 | 1.3 | 0.4 | 1.3 | 0.6 | 0.0 | 0.2 | 0.9 | 0.6 | 0.3 | 0.0 | 0.0 | 0.0 | 1.7 | 0.5 | 0.1 | 0.2 | 0.0 | | | 0.3 | 0.3 | |
| 29 | RD6 | 3.4 | | 4.1 | 4.1 | 1.5 | 4.8 | 3.9 | | | 5.4 | 4.1 | 1.6 | | 2.4 | 2.9 | 3.7 | | 4.2 | 4.0 | 1.6 | 4.2 | | 4.2 | 3.2 | 3.4 | 3.4 | 3.6 |
| 30 | AZUCENA | 3.2 | 3.2 | 2.8 | 2.8 | 1.1 | 3.2 | 3.5 | 2.5 | 3.6 | 2.4 | 3.3 | 2.6 | 3.6 | 3.1 | 0.9 | 1.8 | 3.5 | 3.1 | 2.7 | 1.9 | 3.5 | 3.2 | 3.4 | 2.5 | 3.2 | 3.2 | 2.2 |
| 31 | IR64 | 1.0 | 0.2 | 0.3 | 0.3 | 2.6 | 0.1 | 1.1 | 3.9 | 0.3 | 0.2 | 2.0 | 0.1 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.9 | 0.2 | 0.1 | 3.2 | 0.3 | 1.7 | 4.4 | 1.0 | 1.0 | 5.0 |
| 32 | IR62266 | 0.8 | 0.2 | 0.5 | 0.3 | 1.4 | 0.6 | 0.0 | 3.7 | 0.4 | 0.1 | 0.7 | 0.6 | 0.4 | 0.6 | 0.0 | 0.0 | 0.2 | 1.5 | 0.4 | 0.4 | 0.8 | 0.2 | 0.5 | 4.4 | 0.8 | 0.8 | 4.6 |
| | mean | 1.3 | 3.3 | 2.8 | 3.1 | 1.0 | 3.7 | 2.2 | 4.6 | 3.7 | 3.0 | 2.5 | 1.1 | 3.7 | 1.6 | 1.6 | 2.1 | 1.1 | 3.3 | 2.9 | 0.9 | 3.4 | 3.5 | 3.6 | 3.7 | 1.3 | 1.3 | 3.6 |
| | SD | 1.38 | 2.09 | 1.59 | 1.64 | 1.06 | 1.69 | 1.34 | 1.19 | 2.20 | 1.98 | 1.30 | 1.23 | 2.20 | 1.19 | 1.13 | 1.40 | 1.58 | 1.10 | 1.26 | 1.10 | 1.13 | 2.18 | 1.37 | 1.15 | 1.38 | 1.38 | 0.98 |

Appendix Table 5. Details of leaf blast scoring for parental lines as check from 587

RILs population screening set

| Isolate | Observation | KDML105 | | | | | | JHN | | | | | |
|---------|-------------|---------|------|------|------|------|-----|------|------|------|------|------|-----|
| | | Rep1 | Rep2 | Rep3 | Rep4 | Rep5 | Avg | Rep1 | Rep2 | Rep3 | Rep4 | Rep5 | Avg |
| LPDR16 | 1 | 6 | 5 | 6 | 5 | 6 | 5.6 | 0 | 1 | 0 | 0 | 0 | 0.3 |
| | 2 | 6 | 4 | 6 | 5 | 5 | 5.2 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 3 | 6 | 4 | 6 | 5 | 6 | 5.4 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 4 | 5 | 4 | 5 | 4 | 5 | 4.6 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 5 | 6 | 5 | 6 | 4 | 6 | 5.4 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 6 | 6 | 4 | 6 | 5 | 6 | 5.4 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 7 | 6 | 5 | 6 | 5 | 6 | 5.6 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 8 | 5 | 4 | 4 | 5 | 5 | 4.6 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 9 | 4 | 4 | 4 | 5 | 4 | 4.2 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 10 | 4 | 5 | 4 | 3 | 4 | 4.0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 11 | 4 | 4 | 4 | 5 | 4 | 4.2 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 12 | 5 | 4 | 5 | 4 | 5 | 4.6 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 13 | 4 | 4 | 5 | 4 | 4 | 4.2 | 0 | 1 | 0 | 0 | 0 | 0.3 |
| | 14 | 4 | 3 | 4 | | 6 | 4.3 | 0 | 1 | 0 | 0 | 0 | 0.3 |
| | 15 | 5 | 4 | 5 | 5 | 4 | 4.6 | 1 | 0 | 0 | 0 | 1 | 0.4 |
| | 16 | 4 | 5 | 4 | 5 | 5 | 4.6 | 1 | 0 | 1 | 0 | 0 | 0.4 |
| | 17 | 4 | 5 | 5 | 5 | 4 | 4.6 | 0 | 0 | 0 | 0 | | 0.0 |
| | 18 | 4 | 4 | 4 | 5 | 4 | 4.2 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 19 | 5 | 5 | 5 | 4 | 5 | 4.8 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| mean | | | | | | 4.74 | | | | | | 0.08 | |
| SD | | | | | | 0.53 | | | | | | 0.15 | |
| LPDR41 | 1 | 4 | 4 | 5 | 4 | 4 | 4.2 | 0 | 0 | 1 | 0 | 0 | 0.2 |
| | 2 | 4 | 4 | 4 | 4 | 4 | 4.0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 3 | 5 | 4 | 5 | 4 | 5 | 4.6 | 1 | 0 | 1 | 0 | 1 | 0.6 |
| | 4 | 4 | 5 | 4 | 5 | 4 | 4.4 | 1 | 1 | 0 | 1 | 1 | 0.8 |
| | 5 | 5 | 5 | 4 | 5 | 4 | 4.6 | 1 | 1 | 1 | 1 | 1 | 1.0 |
| | 6 | 4 | 6 | 4 | 6 | 4 | 4.8 | 1 | 1 | 1 | 1 | 1 | 1.0 |
| | 7 | 4 | 6 | 5 | 6 | 4 | 5.0 | 1 | 0 | 1 | 0 | 1 | 0.6 |
| | 8 | 5 | 5 | 5 | 5 | 5 | 5.0 | 0 | 1 | 0 | 0 | 0 | 0.2 |
| | 9 | 5 | 5 | 5 | 5 | 5 | 5.0 | 0 | 0 | 1 | 0 | 0 | 0.2 |
| | 10 | 4 | 6 | 5 | 6 | 4 | 5.0 | 0 | 1 | 0 | 1 | 0 | 0.4 |
| | 11 | 4 | 6 | 4 | 6 | 4 | 4.8 | 0 | 1 | 0 | 1 | 0 | 0.4 |
| | 12 | 4 | 6 | 5 | 6 | 4 | 5.0 | 1 | 1 | 1 | 1 | 1 | 1.0 |
| | 13 | 5 | 5 | 5 | 5 | 5 | 5.0 | 1 | 1 | 1 | 1 | 1 | 1.0 |
| | 14 | 5 | 5 | 5 | 5 | 5 | 5.0 | 1 | 1 | 1 | 1 | 1 | 1.0 |
| | 15 | 4 | 5 | 4 | 5 | 4 | 4.4 | 0 | 0 | 1 | 0 | 0 | 0.2 |
| | 16 | 5 | 5 | 5 | 4 | 5 | 4.8 | 1 | 0 | 1 | 0 | 1 | 0.6 |
| | 17 | 5 | 5 | 5 | 5 | 5 | 5.0 | 1 | 1 | 1 | 1 | 1 | 1.0 |
| | 18 | 5 | 4 | 5 | 5 | 5 | 4.8 | 0 | 1 | 0 | 1 | 0 | 0.4 |
| | 19 | 4 | 5 | 4 | 5 | 4 | 4.4 | 0 | 1 | 0 | 1 | 0 | 0.4 |
| mean | | | | | | 4.73 | | | | | | 0.58 | |
| SD | | | | | | 0.31 | | | | | | 0.35 | |

Appendix Table 5. (cont'd)

| Isolate | Observation | KDML105 | | | | | | JHN | | | | | |
|---------|-------------|---------|------|------|------|------|-----|------|------|------|------|------|-----|
| | | Rep1 | Rep2 | Rep3 | Rep4 | Rep5 | Avg | Rep1 | Rep2 | Rep3 | Rep4 | Rep5 | Avg |
| LPDR47 | 1 | 4 | 3 | 3 | 4 | 4 | 3.6 | 0 | 0 | 1 | 1 | 0 | 0.4 |
| | 2 | 3 | 4 | 3 | 2 | 2 | 2.8 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 3 | 3 | 2 | 3 | 3 | 3 | 2.8 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 4 | 4 | 3 | 3 | 2 | 3 | 3.0 | 1 | 0 | 0 | 0 | 0 | 0.2 |
| | 5 | 3 | 3 | 4 | 3 | 3 | 3.2 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 6 | 4 | 3 | 2 | | 3 | 3.0 | 0 | 0 | 0 | 1 | | 0.3 |
| | 7 | 4 | 4 | 3 | 2 | 4 | 3.4 | 0 | 1 | 0 | 0 | 1 | 0.4 |
| | 8 | 3 | 2 | 3 | 3 | 3 | 2.8 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 9 | 3 | 3 | 3 | 3 | 2 | 2.8 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 10 | 3 | 3 | 3 | | 3 | 3.0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 11 | 2 | 3 | 2 | | 3 | 2.5 | 0 | 0 | 1 | 1 | 0 | 0.4 |
| | 12 | 4 | 2 | 2 | 3 | 3 | 2.8 | 1 | 1 | 0 | 0 | 1 | 0.6 |
| | 13 | 3 | 4 | 3 | 3 | 3 | 3.2 | 1 | 0 | 0 | 0 | 0 | 0.2 |
| | 14 | 3 | 2 | 2 | 2 | 4 | 2.6 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 15 | 3 | 3 | 3 | 3 | 2 | 3.0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 16 | 3 | 2 | 4 | 3 | 3 | 3.0 | 1 | 0 | 1 | 1 | 0 | 0.6 |
| | 17 | 4 | 3 | 3 | 3 | 3 | 2.9 | 0 | 1 | 0 | 1 | 1 | 0.6 |
| | 18 | 2 | 3 | 3 | 4 | 3 | 3.0 | 0 | 0 | 0 | 0 | 0 | 0.0 |
| | 19 | 2 | 3 | 3 | 4 | 3 | 3.0 | 1 | 0 | 1 | 0 | 0 | 0.4 |
| mean | | | | | | 2.97 | | | | | | 0.21 | |
| SD | | | | | | 0.26 | | | | | | 0.24 | |

SD = Standard deviation

Appendix Table 6. The disease severity score of 587 RILs of KDML105/JHN screened with 3 blast isolates

| RIL no. | CODE | LPDR16 | LPDR41 | LPDR47 | RIL no. | CODE | LPDR16 | LPDR41 | LPDR47 |
|---------|------|--------|--------|--------|---------|------|--------|--------|--------|
| 1 | 1-1 | 0.7 | 0.8 | 0.7 | 50 | 30-1 | 1.6 | 4.0 | 3.8 |
| 2 | 1-4 | 0.0 | 1.5 | 0.5 | 51 | 33-1 | 0.4 | 1.0 | 0.3 |
| 3 | 2-2 | 1.4 | 1.5 | 2.0 | 52 | 33-4 | 1.1 | 1.8 | 0.5 |
| 4 | 2-4 | 3.7 | 4.0 | 3.8 | 53 | 35-1 | 5.3 | 4.5 | 0.8 |
| 5 | 5-2 | 0.4 | 1.0 | 0.0 | 54 | 35-3 | 5.4 | 4.0 | 4.5 |
| 6 | 6-1 | 3.3 | 4.0 | 0.3 | 55 | 35-4 | 4.7 | 4.3 | 4.0 |
| 7 | 6-2 | 0.6 | 3.3 | 0.0 | 56 | 36-1 | 0.0 | 0.8 | 0.3 |
| 8 | 6-3 | 2.6 | 3.0 | 0.8 | 57 | 36-2 | | | |
| 9 | 6-4 | 0.3 | 1.3 | 1.8 | 58 | 36-3 | 0.3 | 0.3 | 0.3 |
| 10 | 9-1 | 1.6 | 4.3 | 2.5 | 59 | 36-4 | 0.3 | 0.3 | 0.0 |
| 11 | 9-2 | 0.8 | 3.5 | 1.3 | 60 | 37-1 | 2.0 | 4.3 | 5.0 |
| 12 | 9-3 | 0.2 | 3.3 | 0.0 | 61 | 37-2 | 0.9 | 1.8 | 0.5 |
| 13 | 9-4 | 3.0 | 5.0 | 3.7 | 62 | 37-3 | 0.7 | 1.3 | 0.3 |
| 14 | 10-3 | | | | 63 | 37-4 | 0.9 | 2.0 | 0.0 |
| 15 | 10-4 | 0.5 | 1.5 | 0.5 | 64 | 38-1 | 3.8 | 4.0 | 4.0 |
| 16 | 11-1 | 2.1 | 4.0 | 2.8 | 65 | 38-2 | 4.3 | 4.0 | 3.8 |
| 17 | 11-4 | 0.1 | 0.3 | 1.0 | 66 | 38-4 | 3.8 | 4.0 | 0.8 |
| 18 | 12-1 | 0.1 | 2.3 | 0.3 | 67 | 39-1 | 0.3 | 2.3 | 0.5 |
| 19 | 12-2 | 0.7 | 2.8 | 0.7 | 68 | 39-2 | 2.9 | 4.3 | 0.8 |
| 20 | 12-4 | | 0.8 | 1.3 | 69 | 39-3 | 0.0 | 2.3 | 0.3 |
| 21 | 13-3 | 0.7 | 2.8 | 0.3 | 70 | 39-4 | 0.9 | 2.0 | 0.5 |
| 22 | 13-4 | 0.8 | 2.0 | 0.3 | 71 | 40-1 | 2.7 | 4.0 | 1.3 |
| 23 | 14-4 | 1.7 | 3.3 | 1.0 | 72 | 40-2 | 1.4 | 3.8 | 3.0 |
| 24 | 18-2 | 1.9 | 3.0 | 0.0 | 73 | 40-3 | 3.6 | 4.0 | 1.5 |
| 25 | 18-3 | 0.0 | 2.0 | 0.3 | 74 | 40-4 | 1.9 | 3.5 | 0.3 |
| 26 | 18-4 | 0.6 | 1.0 | 0.3 | 75 | 41-1 | 3.0 | 4.5 | 1.5 |
| 27 | 20-2 | 0.0 | 1.3 | 1.8 | 76 | 41-2 | 3.0 | 3.5 | 0.3 |
| 28 | 20-3 | | | | 77 | 41-3 | 4.1 | 4.5 | 4.3 |
| 29 | 20-4 | | | | 78 | 41-4 | 4.9 | 4.8 | 4.3 |
| 30 | 21-1 | 1.4 | 3.8 | 0.3 | 79 | 42-2 | 3.0 | 2.3 | 0.0 |
| 31 | 22-1 | 3.2 | 4.8 | 2.3 | 80 | 42-3 | 2.6 | 3.8 | 0.3 |
| 32 | 22-3 | 1.5 | 4.0 | 0.3 | 81 | 42-4 | 4.2 | 4.5 | 0.5 |
| 33 | 22-4 | 1.0 | 1.3 | 0.8 | 82 | 43-2 | 1.7 | 1.5 | 0.0 |
| 34 | 23-2 | 0.8 | 0.0 | 0.8 | 83 | 43-3 | | 0.5 | 0.3 |
| 35 | 23-3 | 0.9 | 1.0 | 0.8 | 84 | 43-4 | 0.3 | 0.3 | 0.0 |
| 36 | 23-4 | 2.8 | 4.0 | 3.0 | 85 | 44-1 | 1.0 | 3.5 | 0.5 |
| 37 | 24-1 | 4.3 | 4.8 | 4.5 | 86 | 44-2 | 0.0 | 0.5 | 0.0 |
| 38 | 24-4 | 4.0 | 4.5 | 4.3 | 87 | 45-2 | | | |
| 39 | 25-1 | 0.3 | 1.8 | 0.0 | 88 | 45-3 | 0.0 | 0.8 | 0.0 |
| 40 | 25-3 | 0.1 | 1.8 | 1.3 | 89 | 45-4 | 2.7 | 4.3 | 3.3 |
| 41 | 26-2 | 0.0 | 1.5 | 0.8 | 90 | 46-1 | 3.0 | 2.3 | 0.8 |
| 42 | 26-4 | 3.0 | 4.0 | 1.8 | 91 | 46-3 | 1.4 | 4.0 | 0.3 |
| 43 | 27-1 | 0.4 | 1.8 | 1.3 | 92 | 46-4 | 0.7 | 2.0 | 0.8 |
| 44 | 27-2 | 0.0 | 0.5 | 1.0 | 93 | 47-1 | 0.6 | 0.8 | 0.3 |
| 45 | 27-3 | 0.0 | 1.8 | 0.5 | 94 | 47-4 | 4.2 | 4.3 | 3.8 |
| 46 | 27-4 | 0.7 | 1.3 | 0.5 | 95 | 48-1 | 3.4 | 4.8 | 0.3 |
| 47 | 29-1 | 0.6 | 4.0 | 0.7 | 96 | 49-1 | 0.9 | 2.5 | 0.8 |
| 48 | 29-2 | 4.2 | | | 97 | 49-2 | 1.6 | 3.3 | 0.8 |
| 49 | 29-4 | | | | 98 | 49-3 | 3.5 | 4.3 | 1.3 |

Appendix Table 6. (cont'd)

| RIL no. | CODE | LPDR16 | LPDR41 | LPDR47 | RIL no. | CODE | LPDR16 | LPDR41 | LPDR47 |
|---------|------|--------|--------|--------|---------|------|--------|--------|--------|
| 99 | 49-4 | 3.3 | 4.0 | 4.0 | 148 | 71-1 | 0.1 | 2.5 | 0.0 |
| 100 | 50-1 | | | | 149 | 71-2 | 2.0 | 2.8 | 1.8 |
| 101 | 50-3 | 0.0 | 0.8 | 0.8 | 150 | 71-3 | 4.1 | 4.0 | 4.3 |
| 102 | 50-4 | 1.0 | 1.5 | 1.0 | 151 | 71-4 | 1.4 | 3.5 | 0.5 |
| 103 | 51-1 | 2.3 | 4.0 | 3.0 | 152 | 72-1 | 2.0 | 3.3 | 0.3 |
| 104 | 51-2 | 4.2 | 5.0 | 4.8 | 153 | 72-2 | 1.0 | 3.0 | 1.7 |
| 105 | 51-3 | 0.0 | 1.8 | 0.5 | 154 | 72-3 | 1.7 | 4.0 | 1.8 |
| 106 | 51-4 | 1.7 | 0.7 | 0.3 | 155 | 72-4 | 0.7 | 3.5 | 1.5 |
| 107 | 52-1 | 2.4 | 4.5 | 0.5 | 156 | 74-1 | 1.9 | 5.0 | 0.5 |
| 108 | 52-2 | 0.3 | 0.0 | 0.0 | 157 | 74-2 | | | |
| 109 | 52-4 | 0.9 | 4.5 | 0.3 | 158 | 74-3 | 0.9 | 1.3 | 0.0 |
| 110 | 53-1 | 1.7 | 3.0 | 0.8 | 159 | 74-4 | 0.0 | 1.8 | 2.0 |
| 111 | 53-3 | 2.1 | 3.0 | 0.5 | 160 | 75-1 | 0.3 | 1.5 | 2.3 |
| 112 | 53-4 | 3.1 | 4.0 | 0.8 | 161 | 75-3 | 0.0 | 1.8 | 2.8 |
| 113 | 55-2 | 0.0 | 0.8 | 0.0 | 162 | 75-4 | 0.0 | 1.5 | 2.0 |
| 114 | 55-4 | 0.6 | 1.0 | 1.8 | 163 | 76-1 | 0.3 | 2.3 | 2.8 |
| 115 | 56-1 | 0.6 | 4.5 | 1.5 | 164 | 76-2 | 0.0 | 1.5 | 2.3 |
| 116 | 56-2 | 0.1 | 0.0 | 0.0 | 165 | 76-3 | 0.4 | 2.5 | 1.0 |
| 117 | 56-3 | 0.0 | 3.8 | 0.3 | 166 | 76-4 | 0.3 | 2.3 | 1.3 |
| 118 | 58-1 | 0.0 | 0.5 | 0.0 | 167 | 77-1 | 0.0 | 2.0 | 2.3 |
| 119 | 58-2 | 0.9 | 5.0 | 0.0 | 168 | 77-2 | 0.0 | 2.8 | 2.3 |
| 120 | 58-3 | 1.3 | 4.8 | 0.5 | 169 | 77-3 | 1.9 | 3.7 | 1.3 |
| 121 | 58-4 | | | | 170 | 77-4 | 0.4 | 1.5 | 1.5 |
| 122 | 59-2 | 0.1 | 3.0 | 1.0 | 171 | 78-1 | 0.0 | 1.3 | 1.3 |
| 123 | 59-3 | 0.3 | 1.0 | 0.0 | 172 | 78-2 | 0.0 | 1.5 | 0.3 |
| 124 | 61-1 | 0.0 | 0.3 | 0.5 | 173 | 78-3 | 0.0 | 0.5 | 0.0 |
| 125 | 61-2 | 0.0 | 1.0 | 0.8 | 174 | 78-4 | 0.9 | 4.5 | 0.3 |
| 126 | 62-1 | 2.4 | 4.0 | 0.5 | 175 | 79-1 | 0.0 | 2.0 | 0.0 |
| 127 | 62-2 | 2.3 | 4.3 | 0.3 | 176 | 79-2 | 2.0 | 5.3 | 1.8 |
| 128 | 62-3 | 0.6 | 3.3 | 0.0 | 177 | 79-3 | 2.3 | 5.5 | 4.0 |
| 129 | 62-4 | 1.7 | 3.5 | 0.0 | 178 | 79-4 | 4.2 | 4.0 | 4.3 |
| 130 | 63-1 | 3.2 | 5.0 | 0.3 | 179 | 81-1 | 0.6 | 0.3 | 0.0 |
| 131 | 63-2 | 1.2 | 2.8 | 0.0 | 180 | 81-3 | | 3.0 | 0.0 |
| 132 | 63-3 | 0.1 | 1.0 | 0.0 | 181 | 83-1 | 2.9 | 5.0 | 4.0 |
| 133 | 63-4 | 2.7 | 4.5 | 0.0 | 182 | 83-2 | 1.9 | 4.5 | 0.5 |
| 134 | 64-1 | 0.0 | 2.8 | 0.0 | 183 | 83-3 | 2.3 | 4.0 | 1.8 |
| 135 | 64-2 | 0.0 | 2.5 | 1.5 | 184 | 83-4 | 1.3 | 4.5 | 4.0 |
| 136 | 64-3 | 0.0 | 2.3 | 0.5 | 185 | 84-1 | 1.6 | 3.0 | 1.8 |
| 137 | 65-3 | 1.8 | 4.0 | 0.8 | 186 | 84-2 | 1.0 | 1.8 | 0.3 |
| 138 | 65-4 | 0.0 | 2.8 | 0.3 | 187 | 84-3 | 2.3 | 2.3 | 0.0 |
| 139 | 66-1 | 0.0 | 3.0 | 0.0 | 188 | 84-4 | | 3.0 | 0.0 |
| 140 | 66-2 | 0.0 | 3.0 | 1.3 | 189 | 85-1 | 0.4 | 1.0 | 0.0 |
| 141 | 66-3 | 0.0 | 1.3 | 1.5 | 190 | 85-2 | 0.0 | 3.0 | 0.3 |
| 142 | 66-4 | 0.3 | 2.0 | 2.0 | 191 | 85-3 | 0.3 | 5.5 | 3.7 |
| 143 | 67-2 | 1.4 | 3.5 | 1.3 | 192 | 85-4 | 2.3 | 5.3 | 3.3 |
| 144 | 69-3 | 4.3 | 5.0 | 4.8 | 193 | 86-1 | 1.2 | 1.8 | 2.8 |
| 145 | 69-4 | 3.3 | 5.0 | 0.8 | 194 | 86-2 | 2.4 | 4.8 | 4.0 |
| 146 | 70-2 | 2.6 | 4.8 | 1.5 | 195 | 86-3 | | 1.3 | 1.0 |
| 147 | 70-4 | 2.8 | 4.5 | 0.8 | 196 | 86-4 | 1.0 | 3.5 | 1.3 |

Appendix Table 6. (cont'd)

| RIL no. | CODE | LPDR16 | LPDR41 | LPDR47 | RIL no. | CODE | LPDR16 | LPDR41 | LPDR47 |
|---------|-------|--------|--------|--------|---------|-------|--------|--------|--------|
| 197 | 87-3 | 1.9 | 4.0 | 0.3 | 246 | 110-2 | 0.0 | 1.0 | 0.3 |
| 198 | 87-4 | | 1.3 | 0.5 | 247 | 110-3 | 0.0 | 0.0 | 0.0 |
| 199 | 88-1 | 0.0 | 2.5 | 1.3 | 248 | 110-4 | 0.4 | 4.0 | 0.8 |
| 200 | 88-2 | 0.7 | 0.3 | 0.5 | 249 | 111-1 | 0.0 | 0.8 | 1.0 |
| 201 | 88-3 | 1.4 | 2.0 | 1.0 | 250 | 111-2 | 0.4 | 2.3 | 0.5 |
| 202 | 88-4 | | | | 251 | 111-3 | 0.0 | 1.8 | 1.5 |
| 203 | 93-1 | 0.0 | 1.5 | 0.5 | 252 | 111-4 | 1.3 | 4.3 | 1.0 |
| 204 | 93-2 | 0.0 | 2.0 | 3.7 | 253 | 112-1 | 2.1 | 4.3 | 4.0 |
| 205 | 93-3 | 0.0 | 0.3 | 0.0 | 254 | 112-3 | 3.5 | 5.0 | 4.0 |
| 206 | 93-4 | 0.0 | 0.8 | 0.5 | 255 | 112-4 | 4.8 | 4.3 | 3.8 |
| 207 | 94-1 | 0.3 | 0.5 | 2.0 | 256 | 113-3 | 2.8 | 5.3 | 0.3 |
| 208 | 94-2 | 2.0 | 4.5 | 0.5 | 257 | 113-4 | 3.2 | 4.3 | 0.0 |
| 209 | 94-4 | 0.6 | 0.3 | 0.3 | 258 | 115-1 | 0.0 | 0.5 | 0.3 |
| 210 | 95-1 | 2.9 | 4.3 | 4.0 | 259 | 115-2 | 4.0 | 5.0 | 3.5 |
| 211 | 95-2 | 2.7 | 5.5 | 4.3 | 260 | 115-3 | 0.7 | 0.0 | 1.3 |
| 212 | 95-3 | 1.9 | 5.0 | 3.0 | 261 | 115-4 | 0.0 | 1.3 | 0.5 |
| 213 | 95-4 | | | | 262 | 116-1 | 0.0 | 1.5 | 0.5 |
| 214 | 97-1 | 0.0 | 1.0 | 0.0 | 263 | 116-2 | | 0.3 | 0.0 |
| 215 | 97-2 | 0.0 | 1.0 | 0.5 | 264 | 116-3 | 0.0 | 0.0 | 0.0 |
| 216 | 97-3 | 0.3 | 0.3 | 0.3 | 265 | 117-1 | | 0.8 | 0.5 |
| 217 | 97-4 | 0.3 | 1.8 | 0.5 | 266 | 117-2 | | 0.5 | 0.5 |
| 218 | 99-1 | 0.0 | 0.5 | 0.3 | 267 | 117-3 | 1.3 | 0.5 | 0.0 |
| 219 | 99-2 | 0.0 | 0.5 | 0.0 | 268 | 117-4 | | | |
| 220 | 99-4 | 0.0 | 2.3 | 2.5 | 269 | 118-1 | 1.1 | 0.3 | 0.0 |
| 221 | 100-1 | 0.6 | 3.8 | 0.0 | 270 | 118-2 | 2.0 | 4.0 | 0.0 |
| 222 | 100-2 | 0.9 | 4.5 | 0.0 | 271 | 118-3 | 2.1 | 4.0 | 1.5 |
| 223 | 100-3 | 0.4 | 4.0 | 3.3 | 272 | 118-4 | 3.1 | 5.3 | 3.3 |
| 224 | 100-4 | 2.4 | 4.0 | 4.0 | 273 | 119-1 | 0.3 | 1.3 | 0.0 |
| 225 | 101-1 | 0.0 | 0.5 | 0.0 | 274 | 119-2 | 0.6 | 0.5 | 0.0 |
| 226 | 101-2 | | | | 275 | 119-3 | 4.0 | 4.0 | 0.0 |
| 227 | 101-3 | | | | 276 | 119-4 | 0.6 | 0.3 | 0.0 |
| 228 | 103-1 | 0.6 | 0.5 | 1.8 | 277 | 121-2 | 0.2 | 2.5 | 1.3 |
| 229 | 103-2 | 0.0 | 0.0 | 1.0 | 278 | 121-3 | 0.2 | 1.3 | 0.3 |
| 230 | 104-1 | 1.0 | 5.0 | 3.3 | 279 | 122-1 | 0.9 | 0.3 | 0.0 |
| 231 | 104-2 | 1.0 | 0.3 | 0.8 | 280 | 122-2 | | 2.0 | 0.0 |
| 232 | 104-3 | 2.3 | 5.5 | 3.0 | 281 | 122-3 | 1.2 | 3.5 | 1.3 |
| 233 | 104-4 | 2.3 | 5.3 | 1.3 | 282 | 122-4 | 1.4 | 3.0 | 0.5 |
| 234 | 105-1 | 0.0 | 1.0 | 1.3 | 283 | 123-1 | 2.0 | 2.5 | 0.0 |
| 235 | 105-2 | 0.0 | 0.3 | 0.3 | 284 | 123-2 | 0.6 | 0.3 | 0.0 |
| 236 | 105-3 | 2.3 | 5.0 | 3.8 | 285 | 123-3 | 0.9 | 0.0 | 0.0 |
| 237 | 105-4 | 1.4 | 4.3 | 0.3 | 286 | 123-4 | 1.0 | 0.3 | 0.5 |
| 238 | 106-1 | 0.0 | 3.0 | 2.3 | 287 | 124-1 | 2.3 | 4.0 | 0.8 |
| 239 | 106-2 | 1.3 | 2.3 | 2.0 | 288 | 124-2 | 1.0 | 0.0 | 0.3 |
| 240 | 106-3 | 1.3 | 3.0 | 3.3 | 289 | 124-3 | 1.9 | 5.3 | 1.8 |
| 241 | 109-1 | 3.4 | 2.5 | 2.3 | 290 | 124-4 | 0.6 | 1.3 | 0.3 |
| 242 | 109-2 | 3.7 | 5.0 | 4.5 | 291 | 125-1 | 2.3 | 5.5 | 3.8 |
| 243 | 109-3 | 3.6 | 5.5 | 4.3 | 292 | 125-2 | 1.9 | 5.8 | 3.5 |
| 244 | 109-4 | 3.0 | 5.8 | 4.0 | 293 | 125-3 | 4.0 | 4.8 | 0.3 |
| 245 | 110-1 | 0.8 | 5.5 | 0.5 | 294 | 125-4 | 3.5 | 6.0 | 4.0 |

Appendix Table 6. (cont'd)

| RIL no. | CODE | LPDR16 | LPDR41 | LPDR47 | RIL no. | CODE | LPDR16 | LPDR41 | LPDR47 |
|---------|-------|--------|--------|--------|---------|-------|--------|--------|--------|
| 295 | 127-1 | 1.4 | 5.0 | 0.3 | 344 | 142-4 | 2.1 | 4.8 | 4.0 |
| 296 | 127-2 | 1.4 | 4.0 | 2.3 | 345 | 143-1 | | | |
| 297 | 127-3 | 2.0 | 4.0 | 1.5 | 346 | 143-2 | 1.8 | 3.5 | 4.0 |
| 298 | 127-4 | 2.1 | 4.5 | 2.0 | 347 | 143-3 | 0.0 | 3.3 | 0.0 |
| 299 | 128-1 | 3.0 | 5.5 | 2.0 | 348 | 143-4 | 2.5 | 2.5 | 4.0 |
| 300 | 128-2 | | | | 349 | 144-1 | | 0.3 | 1.3 |
| 301 | 128-3 | 0.7 | 0.5 | 1.3 | 350 | 144-2 | 6.0 | 4.8 | 3.3 |
| 302 | 128-4 | 2.4 | 4.3 | 1.5 | 351 | 144-3 | 2.4 | 3.3 | 0.8 |
| 303 | 129-1 | 0.5 | 1.0 | 1.5 | 352 | 144-4 | 2.6 | 3.5 | 4.5 |
| 304 | 129-2 | 0.2 | 0.7 | 1.3 | 353 | 145-1 | 2.0 | 1.8 | 0.3 |
| 305 | 129-3 | | 2.3 | 1.0 | 354 | 145-2 | 2.0 | 2.8 | 0.5 |
| 306 | 129-4 | 0.1 | 0.5 | 1.3 | 355 | 145-3 | 2.7 | 3.0 | 2.8 |
| 307 | 130-1 | 1.2 | 2.3 | 2.5 | 356 | 145-4 | 2.8 | 3.5 | 3.0 |
| 308 | 130-2 | 1.3 | 3.5 | 0.7 | 357 | 146-1 | 0.0 | 0.0 | 0.5 |
| 309 | 130-3 | 1.1 | 3.0 | 2.5 | 358 | 146-2 | 0.2 | 0.3 | 0.3 |
| 310 | 130-4 | 1.0 | 3.8 | 0.5 | 359 | 146-3 | 0.2 | 0.8 | 0.5 |
| 311 | 131-1 | 1.3 | 0.5 | 0.3 | 360 | 146-4 | 1.0 | 0.0 | 0.3 |
| 312 | 131-2 | 1.6 | 4.0 | 0.8 | 361 | 148-3 | 3.3 | 3.5 | 1.0 |
| 313 | 131-3 | | 0.0 | 0.5 | 362 | 148-4 | 0.0 | 0.8 | 0.3 |
| 314 | 131-4 | 0.0 | 0.3 | 0.3 | 363 | 151-1 | 0.0 | 2.5 | 0.5 |
| 315 | 132-1 | 0.3 | 0.5 | 1.3 | 364 | 151-4 | 3.6 | 2.3 | 4.5 |
| 316 | 132-2 | 1.3 | 0.3 | 0.5 | 365 | 152-1 | 4.6 | 5.0 | 2.3 |
| 317 | 132-3 | 1.2 | 0.8 | 0.5 | 366 | 152-4 | 2.8 | 2.8 | 0.5 |
| 318 | 132-4 | 1.8 | 4.8 | 3.3 | 367 | 153-1 | 0.0 | 2.5 | 0.3 |
| 319 | 133-2 | 3.8 | 5.7 | 5.0 | 368 | 153-2 | | | |
| 320 | 133-3 | 0.0 | 0.5 | 0.0 | 369 | 153-3 | 1.7 | 3.0 | 1.5 |
| 321 | 133-4 | 3.0 | 3.5 | 1.8 | 370 | 154-1 | 5.0 | 4.5 | 1.8 |
| 322 | 136-1 | 0.0 | 3.0 | 2.0 | 371 | 154-2 | 4.8 | 4.8 | 0.3 |
| 323 | 136-2 | 0.2 | 0.3 | 1.5 | 372 | 154-3 | 4.2 | 4.3 | 0.3 |
| 324 | 136-3 | 3.7 | 4.0 | 4.0 | 373 | 154-4 | 0.3 | 0.0 | 0.5 |
| 325 | 136-4 | 0.8 | 3.3 | 3.3 | 374 | 155-1 | 0.8 | 0.3 | 0.8 |
| 326 | 137-1 | 0.7 | 1.3 | 0.3 | 375 | 155-2 | 2.5 | 2.5 | 4.5 |
| 327 | 137-2 | 4.1 | 6.0 | 4.3 | 376 | 155-3 | | 4.0 | 4.0 |
| 328 | 137-3 | 4.1 | 5.0 | 4.0 | 377 | 155-4 | 4.6 | 3.7 | 4.3 |
| 329 | 139-1 | 3.0 | 3.8 | 2.0 | 378 | 156-1 | 4.1 | 4.5 | 0.0 |
| 330 | 139-2 | 0.3 | 1.0 | 1.8 | 379 | 156-4 | 4.3 | 4.8 | 0.3 |
| 331 | 139-3 | | 2.3 | 1.5 | 380 | 157-2 | | 5.0 | 2.5 |
| 332 | 139-4 | 1.2 | 1.8 | 3.5 | 381 | 157-3 | 3.9 | 5.0 | 1.8 |
| 333 | 140-1 | 0.4 | 1.0 | 1.5 | 382 | 157-4 | 0.4 | 3.3 | 0.5 |
| 334 | 140-2 | 3.0 | 4.8 | 4.8 | 383 | 159-1 | 0.4 | 3.3 | 1.7 |
| 335 | 140-3 | | 4.5 | 3.5 | 384 | 159-2 | 0.9 | 3.3 | 3.3 |
| 336 | 140-4 | 3.3 | 5.8 | 4.0 | 385 | 159-3 | 4.3 | 4.0 | 4.8 |
| 337 | 141-1 | 5.4 | 6.0 | 1.5 | 386 | 160-1 | 3.3 | 4.5 | 0.0 |
| 338 | 141-2 | 5.0 | 4.3 | 1.3 | 387 | 160-2 | 3.7 | 4.5 | 5.0 |
| 339 | 141-3 | 5.8 | 5.8 | 4.5 | 388 | 160-3 | 4.3 | 4.3 | 4.0 |
| 340 | 141-4 | 3.9 | 4.0 | 0.5 | 389 | 162-1 | | | |
| 341 | 142-1 | 6.0 | 6.0 | 2.3 | 390 | 162-2 | | | |
| 342 | 142-2 | 3.2 | 2.3 | 2.0 | 391 | 163-1 | | 6.0 | 4.8 |
| 343 | 142-3 | 4.3 | 4.0 | 0.5 | 392 | 163-2 | | 5.8 | 4.8 |

Appendix Table 6. (cont'd)

| RIL no. | CODE | LPDR16 | LPDR41 | LPDR47 | RIL no. | CODE | LPDR16 | LPDR41 | LPDR47 |
|---------|-------|--------|--------|--------|---------|-------|--------|--------|--------|
| 393 | 163-3 | 4.2 | 5.0 | 6.0 | 442 | 183-4 | 4.6 | 6.0 | 2.8 |
| 394 | 164-1 | 0.7 | 2.5 | 0.5 | 443 | 185-1 | | | |
| 395 | 164-2 | 0.6 | 0.8 | 0.8 | 444 | 185-2 | 0.0 | 1.0 | 0.5 |
| 396 | 164-3 | 0.6 | 1.0 | 0.0 | 445 | 187-1 | 0.0 | 1.3 | 0.3 |
| 397 | 164-4 | 0.0 | 0.3 | 0.5 | 446 | 187-2 | 0.0 | 1.0 | 1.5 |
| 398 | 166-1 | 3.0 | 1.3 | 4.8 | 447 | 187-4 | 0.0 | 0.5 | 0.0 |
| 399 | 166-2 | | 0.0 | 1.0 | 448 | 189-1 | 4.5 | 4.8 | 5.5 |
| 400 | 166-3 | 1.1 | 1.3 | 3.5 | 449 | 189-3 | | | |
| 401 | 166-4 | 1.7 | 4.0 | 0.5 | 450 | 189-4 | | | |
| 402 | 168-1 | 2.9 | 4.7 | 1.0 | 451 | 190-1 | 0.0 | 0.5 | 0.5 |
| 403 | 168-3 | 3.0 | 5.3 | 5.5 | 452 | 190-2 | 0.7 | 4.7 | 5.8 |
| 404 | 168-4 | 4.7 | 4.8 | 5.3 | 453 | 190-3 | 0.0 | 0.5 | 0.0 |
| 405 | 169-1 | 5.3 | 5.0 | 5.0 | 454 | 190-4 | 0.6 | 4.8 | 1.5 |
| 406 | 169-2 | 1.0 | 0.5 | 0.8 | 455 | 191-1 | 0.0 | 0.3 | 1.0 |
| 407 | 169-3 | 0.0 | 0.5 | 0.0 | 456 | 191-2 | 0.0 | 0.3 | 0.8 |
| 408 | 170-1 | 0.7 | 1.5 | 2.0 | 457 | 191-3 | 0.0 | 0.5 | 1.5 |
| 409 | 170-2 | | | | 458 | 191-4 | 0.0 | 0.8 | 1.3 |
| 410 | 170-3 | 5.1 | 6.0 | 3.0 | 459 | 193-1 | 0.0 | 0.5 | 0.5 |
| 411 | 170-4 | 1.0 | 0.7 | 0.0 | 460 | 193-2 | 0.0 | 0.3 | 0.0 |
| 412 | 172-1 | 4.7 | 4.8 | 2.7 | 461 | 193-3 | | 4.0 | 0.0 |
| 413 | 172-2 | 3.2 | 5.8 | 5.0 | 462 | 193-4 | 0.0 | 4.3 | 1.0 |
| 414 | 173-1 | 0.0 | 1.3 | 1.8 | 463 | 194-1 | 0.0 | 1.3 | 0.3 |
| 415 | 173-2 | 0.1 | 1.5 | 1.5 | 464 | 194-2 | 0.1 | 1.3 | 0.5 |
| 416 | 173-3 | 0.4 | 2.5 | 0.0 | 465 | 194-4 | 0.1 | 1.0 | 0.0 |
| 417 | 173-4 | 0.0 | 0.3 | 0.5 | 466 | 195-3 | 0.0 | 1.0 | 1.0 |
| 418 | 175-1 | 0.3 | 3.0 | 3.5 | 467 | 195-4 | 0.0 | 0.3 | 0.5 |
| 419 | 175-2 | 5.0 | 5.0 | 5.0 | 468 | 196-2 | 1.1 | 4.8 | 4.5 |
| 420 | 175-3 | 4.8 | 5.5 | 5.5 | 469 | 196-4 | 3.0 | 4.5 | 4.0 |
| 421 | 175-4 | 5.0 | 5.8 | 5.3 | 470 | 197-1 | 0.0 | 3.0 | 1.0 |
| 422 | 176-1 | 0.0 | 3.3 | 0.0 | 471 | 197-2 | 0.7 | 5.0 | 0.0 |
| 423 | 176-2 | 0.6 | 0.3 | 1.5 | 472 | 197-3 | 2.6 | 5.8 | 3.5 |
| 424 | 176-4 | 4.3 | 5.8 | 4.5 | 473 | 197-4 | 0.7 | 6.0 | 1.5 |
| 425 | 178-1 | 3.0 | 6.0 | 3.0 | 474 | 198-1 | 0.0 | 0.5 | 0.8 |
| 426 | 178-2 | 2.8 | 4.0 | 0.0 | 475 | 198-2 | 0.0 | 0.3 | 1.0 |
| 427 | 178-3 | 2.0 | 4.8 | 0.3 | 476 | 198-3 | 0.0 | 0.5 | 1.0 |
| 428 | 179-1 | 3.1 | 3.5 | 3.5 | 477 | 198-4 | 0.3 | 0.5 | 0.5 |
| 429 | 179-2 | 4.7 | 5.0 | 3.5 | 478 | 200-1 | 0.3 | 1.5 | 0.0 |
| 430 | 179-3 | 2.3 | 3.8 | 4.0 | 479 | 200-2 | 0.0 | 0.3 | 0.0 |
| 431 | 179-4 | 4.0 | 5.5 | 3.8 | 480 | 200-3 | 1.0 | 1.0 | 0.5 |
| 432 | 180-1 | 1.0 | 1.3 | 0.3 | 481 | 201-3 | 3.4 | 5.3 | 2.3 |
| 433 | 180-2 | 3.7 | 6.0 | 6.0 | 482 | 201-4 | 3.6 | 5.8 | 4.5 |
| 434 | 180-3 | 4.3 | 6.0 | 4.8 | 483 | 202-1 | 0.4 | 0.5 | 0.5 |
| 435 | 180-4 | 0.7 | 1.0 | 4.0 | 484 | 202-2 | 0.0 | 0.3 | 0.0 |
| 436 | 181-1 | 5.4 | 6.0 | 5.8 | 485 | 202-3 | 0.4 | 0.3 | 0.3 |
| 437 | 181-3 | 0.6 | 2.0 | 4.0 | 486 | 202-4 | 4.7 | 6.0 | 4.8 |
| 438 | 181-4 | 0.0 | 2.0 | 0.5 | 487 | 203-1 | 0.2 | | 0.0 |
| 439 | 183-1 | 4.0 | 6.0 | 0.3 | 488 | 203-3 | 0.4 | 1.8 | 0.3 |
| 440 | 183-2 | 3.8 | 5.8 | 0.5 | 489 | 203-4 | | | |
| 441 | 183-3 | 4.7 | 5.0 | 5.0 | 490 | 204-1 | 0.3 | 2.3 | 0.3 |

Appendix Table 6. (cont'd)

| RIL no. | CODE | LPDR16 | LPDR41 | LPDR47 | RIL no. | CODE | LPDR16 | LPDR41 | LPDR47 |
|---------|-------|--------|--------|--------|---------|-------|--------|--------|--------|
| 491 | 204-2 | 1.9 | 5.3 | 4.5 | 540 | 222-4 | 2.0 | 5.8 | 2.3 |
| 492 | 204-3 | 2.4 | 4.8 | 0.5 | 541 | 223-1 | 0.0 | 2.5 | 2.8 |
| 493 | 204-4 | 4.6 | 5.8 | 3.5 | 542 | 223-2 | 0.0 | 0.5 | 0.5 |
| 494 | 206-1 | 2.1 | 5.8 | 4.7 | 543 | 223-3 | 0.0 | 0.5 | 0.0 |
| 495 | 206-2 | 0.7 | 3.0 | 3.0 | 544 | 223-4 | 0.4 | 2.8 | 1.8 |
| 496 | 206-3 | 3.0 | 4.5 | 4.3 | 545 | 224-1 | 0.4 | 2.3 | 0.3 |
| 497 | 206-4 | 0.8 | 0.5 | 0.5 | 546 | 224-2 | 0.1 | 0.3 | 0.8 |
| 498 | 208-1 | 2.1 | 5.0 | 1.0 | 547 | 224-3 | 0.0 | 0.5 | 0.5 |
| 499 | 208-2 | 4.9 | 5.0 | 1.5 | 548 | 224-4 | 0.0 | 1.0 | 1.0 |
| 500 | 208-3 | 3.9 | 5.3 | 5.0 | 549 | 225-1 | 2.3 | 4.0 | 4.0 |
| 501 | 209-1 | 1.0 | 2.7 | 3.8 | 550 | 225-2 | 1.7 | 4.0 | 4.0 |
| 502 | 209-2 | 3.4 | 4.5 | 1.5 | 551 | 225-3 | 2.3 | 4.5 | 1.5 |
| 503 | 209-3 | 1.7 | 3.0 | 2.8 | 552 | 225-4 | 2.7 | 3.5 | 3.8 |
| 504 | 209-4 | 1.0 | 2.3 | 1.3 | 553 | 227-2 | 0.6 | 4.0 | 0.0 |
| 505 | 210-1 | 2.1 | 5.3 | 4.8 | 554 | 228-1 | 3.9 | 4.8 | 5.5 |
| 506 | 210-2 | 2.8 | 4.8 | 4.8 | 555 | 228-2 | 3.0 | 4.5 | 4.3 |
| 507 | 210-3 | 1.0 | 0.5 | 0.5 | 556 | 228-3 | 3.9 | 5.0 | 5.8 |
| 508 | 210-4 | 2.9 | 5.0 | 1.5 | 557 | 228-4 | 3.6 | 4.5 | 3.8 |
| 509 | 211-1 | 2.9 | 4.3 | 5.0 | 558 | 229-1 | 0.6 | 0.5 | 0.5 |
| 510 | 211-2 | | | | 559 | 229-2 | 0.6 | 4.3 | 0.5 |
| 511 | 211-3 | | | | 560 | 229-3 | 3.1 | 4.0 | 2.3 |
| 512 | 211-4 | 0.0 | 0.3 | 0.3 | 561 | 229-4 | 0.0 | 1.0 | 1.8 |
| 513 | 214-1 | 1.7 | 1.5 | 0.0 | 562 | 231-1 | 0.0 | 0.8 | 0.5 |
| 514 | 214-2 | 3.0 | 4.3 | 4.0 | 563 | 232-2 | 0.2 | 0.5 | 0.3 |
| 515 | 214-3 | 0.0 | 0.0 | 1.5 | 564 | 232-4 | 0.6 | 0.5 | 1.0 |
| 516 | 214-4 | 0.0 | 1.0 | 2.7 | 565 | 241-1 | 0.6 | 3.3 | 3.8 |
| 517 | 216-1 | 0.0 | 0.8 | 0.0 | 566 | 241-2 | 0.7 | 0.3 | 2.3 |
| 518 | 216-2 | 0.6 | 2.5 | 1.3 | 567 | 241-3 | 1.8 | 3.8 | 4.0 |
| 519 | 216-3 | 3.0 | 5.3 | 4.0 | 568 | 241-4 | 3.2 | 4.0 | 4.0 |
| 520 | 216-4 | 0.3 | 3.0 | 1.0 | 569 | 242-1 | 0.1 | 0.3 | 0.0 |
| 521 | 217-1 | 4.6 | 4.5 | 5.7 | 570 | 242-2 | 0.7 | 1.5 | 1.0 |
| 522 | 217-2 | | 4.8 | 4.7 | 571 | 242-3 | 1.0 | 0.5 | 2.0 |
| 523 | 217-3 | 0.3 | 0.0 | 0.5 | 572 | 242-4 | 0.3 | 1.5 | 0.5 |
| 524 | 217-4 | 0.0 | 2.8 | 1.0 | 573 | 245-1 | 1.3 | 3.0 | 1.0 |
| 525 | 218-1 | 0.0 | 5.5 | 4.5 | 574 | 245-2 | 0.7 | 0.5 | 0.0 |
| 526 | 218-2 | 1.3 | 5.7 | 5.7 | 575 | 245-3 | 1.6 | 4.5 | 1.8 |
| 527 | 218-3 | 0.5 | 5.0 | 5.3 | 576 | 245-4 | 0.9 | 0.5 | 0.3 |
| 528 | 218-4 | 0.2 | 5.5 | 3.8 | 577 | 247-1 | 1.1 | 3.0 | 1.0 |
| 529 | 219-1 | 3.2 | 5.5 | 1.8 | 578 | 247-2 | 0.5 | 2.5 | 0.8 |
| 530 | 219-2 | 3.0 | 5.8 | 3.5 | 579 | 247-3 | 0.6 | 2.3 | 0.8 |
| 531 | 219-4 | 0.0 | 4.8 | 0.5 | 580 | 247-4 | 0.4 | 2.5 | 2.3 |
| 532 | 220-1 | 1.0 | 6.0 | 5.0 | 581 | 248-1 | 0.8 | 4.3 | 0.0 |
| 533 | 220-2 | 1.0 | 0.3 | 2.3 | 582 | 248-2 | 1.5 | 4.5 | 0.5 |
| 534 | 220-3 | 0.7 | 3.3 | 3.3 | 583 | 248-3 | 1.0 | 4.7 | 2.5 |
| 535 | 221-1 | 1.0 | 5.0 | 2.0 | 584 | 248-4 | 1.9 | 5.0 | 0.3 |
| 536 | 221-2 | 1.1 | 5.3 | 0.8 | 585 | 249-1 | 0.1 | 0.3 | 0.0 |
| 537 | 221-4 | 0.9 | 5.5 | 0.5 | 586 | 249-2 | 0.3 | 0.5 | 3.0 |
| 538 | 222-2 | 0.4 | 0.3 | 2.0 | 587 | 249-3 | 0.6 | 0.8 | 1.0 |
| 539 | 222-3 | 3.4 | 6.0 | 1.8 | | | | | |

Appendix Table 7. The disease severity index of 22 isolates were screened with 32 varieties based on 2 replications, GM, F-test & CV

| | Iso02 | Iso04 | Iso06 | Iso08 | Iso10 | Iso13 | Iso14 | Iso16 | Iso17 | Iso19 | Iso21 | Iso30 | Iso35 | Iso38 | Iso41 | Iso43 | Iso47 | Iso50 | Iso63 | Iso65 | Iso67 | Iso71 | |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| TDK1 | 1.4 | 2.4 | 0.6 | 1.5 | 3.1 | 1.4 | 1.7 | 5.0 | 0.5 | 0.7 | 0.1 | 0.5 | 0.5 | 1.2 | 0.6 | 0.8 | 0.4 | 2.4 | 1.1 | 1.2 | 4.5 | 2.6 | |
| TDK3 | 0.8 | 4.4 | 2.8 | 3.8 | 0.0 | 4.4 | 2.7 | 5.3 | 5.2 | 3.8 | 2.8 | 1.6 | 5.2 | 1.4 | 2.6 | 3.0 | 0.8 | 3.7 | 3.1 | 0.4 | 3.9 | 4.5 | |
| BL2 | 1.7 | 5.1 | 3.9 | 4.4 | 1.2 | 5.2 | 2.6 | 5.3 | 5.6 | 4.6 | 3.6 | 1.7 | 5.6 | 1.7 | 2.5 | 3.4 | 0.5 | 4.1 | 4.1 | 0.9 | 4.5 | 5.4 | |
| TDK5 | 3.0 | 4.5 | 4.1 | 4.3 | 0.3 | 5.0 | 3.5 | 4.9 | 4.8 | 4.1 | 3.2 | 2.6 | 4.8 | 0.9 | 2.1 | 3.3 | 5.2 | 4.0 | 3.5 | 3.1 | 4.3 | 4.7 | |
| TDK6 | 0.4 | 5.1 | 4.4 | 5.0 | 0.0 | 5.7 | 3.1 | 4.6 | 5.4 | 5.2 | 3.9 | 0.4 | 5.4 | 2.4 | 2.1 | 3.3 | 0.1 | 4.4 | 4.1 | 1.1 | 4.1 | 5.4 | |
| TDK7 | 0.2 | 5.2 | 4.5 | 5.0 | 0.0 | 5.8 | 3.2 | 5.6 | 5.6 | 5.4 | 3.6 | 0.6 | 5.6 | 2.4 | 2.9 | 3.1 | 0.4 | 5.0 | 3.6 | 2.1 | 4.2 | 5.4 | |
| TDK8 | 1.3 | 4.6 | 3.6 | 4.6 | 1.9 | 4.9 | 3.4 | 5.5 | 5.6 | 4.5 | 3.5 | 0.6 | 5.6 | 3.0 | 0.1 | 3.0 | 0.5 | 4.1 | 3.5 | 0.5 | 3.6 | 4.8 | |
| TDK9 | 0.9 | 0.4 | 0.4 | 1.7 | 3.1 | 3.2 | 1.9 | 5.0 | 2.3 | 0.6 | 0.3 | 1.9 | 2.3 | 1.6 | 0.2 | 0.7 | 0.4 | 2.8 | 1.9 | 0.4 | 4.1 | 0.5 | |
| TDK10 | 0.4 | 5.2 | 4.2 | 4.1 | 0.8 | 4.6 | 3.4 | 5.0 | 5.5 | 4.6 | 3.6 | 0.9 | 5.5 | 2.2 | 2.6 | 3.1 | 1.7 | 4.0 | 3.8 | 0.3 | 3.6 | 5.4 | |
| TSN1 | 0.2 | 5.0 | 4.1 | 4.6 | 0.2 | 5.4 | 3.2 | 5.2 | 5.6 | 5.7 | 3.5 | 0.6 | 5.6 | 0.4 | 2.9 | 3.6 | 0.2 | 4.1 | 3.9 | 0.1 | 3.7 | 5.7 | |
| TSN3 | 0.4 | 0.9 | 2.1 | 0.8 | 3.1 | 1.9 | 0.2 | 4.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 1.1 | 0.2 | 0.1 | 0.2 | 1.7 | 2.9 | 0.4 | 4.0 | 0.9 | |
| PNG1 | 1.4 | 5.3 | 3.8 | 4.1 | 0.0 | 5.2 | 2.3 | 5.5 | 4.8 | 4.3 | 3.3 | 0.9 | 4.8 | 1.2 | 3.1 | 2.9 | 0.9 | 4.2 | 4.0 | 0.9 | 4.0 | 5.5 | |
| PNG3 | 0.9 | 3.8 | 2.9 | 3.2 | 0.2 | 4.4 | 0.2 | 3.8 | 3.5 | 3.5 | 2.0 | 0.2 | 3.5 | 1.9 | 1.8 | 0.9 | 0.3 | 3.6 | 3.5 | 0.4 | 2.3 | 3.9 | |
| PNG4 | 0.1 | 0.6 | 3.4 | 1.4 | 0.4 | 2.2 | 0.4 | 4.7 | 1.1 | 1.9 | 1.8 | 0.0 | 1.1 | 0.2 | 1.3 | 0.0 | 1.4 | 1.9 | 2.0 | 0.4 | 2.5 | 0.8 | |
| PNG5 | 0.0 | 5.4 | 4.2 | 3.9 | 0.0 | 5.4 | 2.9 | 5.4 | 6.0 | 4.5 | 3.1 | 0.2 | 6.0 | 3.4 | 1.6 | 1.9 | 0.3 | 4.2 | 3.4 | 0.2 | 3.9 | 5.6 | |
| PNG6 | 0.5 | 0.1 | 0.7 | 2.2 | 1.3 | 3.3 | 1.1 | 4.7 | 1.1 | 0.2 | 2.3 | 0.4 | 1.1 | 1.7 | 0.7 | 1.0 | 2.0 | 1.9 | 2.0 | 0.4 | 3.5 | 0.1 | |
| BL1 | 0.9 | 4.3 | 3.5 | 3.8 | 0.8 | 4.8 | 2.9 | 5.1 | 5.5 | 4.1 | 3.4 | 0.2 | 5.5 | 2.1 | 2.1 | 3.4 | 0.4 | 4.1 | 3.7 | 0.2 | 3.4 | 4.6 | |
| BL6 | 1.8 | 0.2 | 0.7 | 1.4 | 3.4 | 2.3 | 1.6 | 5.1 | 0.1 | 0.9 | 2.4 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.2 | 3.6 | 2.3 | 0.0 | 3.8 | 0.3 | |
| KK2 | 1.1 | 4.9 | 3.7 | 3.6 | 0.4 | 4.8 | 1.6 | 4.9 | 5.4 | 3.8 | 2.8 | 0.3 | 5.4 | 0.4 | 0.6 | 2.7 | 0.0 | 4.3 | 3.6 | 0.5 | 3.5 | 5.4 | |
| KK11 | 0.7 | 4.9 | 3.9 | 3.9 | 0.2 | 4.7 | 2.2 | 5.1 | 5.7 | 4.1 | 3.6 | 0.6 | 5.7 | 0.6 | 2.8 | 3.1 | 0.0 | 3.8 | 4.0 | 0.2 | 3.5 | 5.2 | |
| KK12 | 0.4 | 5.0 | 3.8 | 4.0 | 0.4 | 4.1 | 1.4 | 4.4 | 5.7 | 4.3 | 3.1 | 0.6 | 5.7 | 0.8 | 2.2 | 1.6 | 0.0 | 3.7 | 4.0 | 0.2 | 3.4 | 5.6 | |
| LNTN1 | 0.2 | 5.1 | 4.2 | 4.7 | 0.0 | 5.0 | 2.7 | 4.4 | 5.4 | 5.0 | 3.6 | 0.1 | 5.4 | 3.1 | 3.0 | 2.0 | 0.6 | 3.9 | 4.0 | 1.1 | 4.2 | 5.4 | |
| NTN1 | 0.8 | 5.0 | 0.7 | 0.9 | 0.5 | 1.1 | 0.2 | 4.5 | 5.5 | 0.2 | 0.4 | 0.9 | 5.5 | 0.8 | 2.2 | 3.5 | 0.6 | 1.4 | 1.8 | 1.3 | 2.7 | 5.3 | |
| CR203 | 4.2 | 4.9 | 4.4 | 4.4 | 1.2 | 5.0 | 3.6 | 4.8 | 4.5 | 4.4 | 3.1 | 4.5 | 4.5 | 4.1 | 1.7 | 3.6 | 4.6 | 4.2 | 3.6 | 2.7 | 4.1 | 5.1 | |
| Lydaw | 5.6 | 2.5 | 3.1 | 4.1 | 0.9 | 4.2 | 4.3 | 5.6 | 3.9 | 3.6 | 3.2 | 5.1 | 3.9 | 4.3 | 1.5 | 3.1 | 5.4 | 3.9 | 2.6 | 5.0 | 4.2 | 2.6 | |
| KDML | 3.9 | 4.9 | 4.4 | 4.6 | 1.6 | 4.6 | 4.1 | 5.3 | 5.8 | 4.2 | 3.8 | 2.3 | 5.8 | 2.4 | 3.2 | 4.1 | 2.6 | 4.1 | 4.0 | 1.9 | 4.3 | 5.2 | |
| JHN | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.3 | 0.2 | 0.4 | 0.6 | 0.0 | 0.1 | 0.0 | 0.6 | 0.0 | 0.0 | 0.2 | 0.0 | 1.0 | 0.4 | 0.0 | 0.2 | 0.1 | |
| CT9993 | 0.5 | 0.0 | 0.1 | 0.4 | 0.1 | 1.3 | 0.4 | 1.3 | 0.6 | 0.0 | 0.2 | 0.9 | 0.6 | 0.3 | 0.0 | 0.0 | 0.0 | 1.8 | 0.5 | 0.1 | 0.2 | 0.0 | |
| RD6 | 3.4 | | 4.1 | 4.1 | 1.5 | 4.9 | 3.9 | | | 5.4 | 4.1 | 1.6 | | 2.4 | 2.9 | 3.7 | | 4.2 | 4.0 | 1.5 | 4.2 | | |
| Azucena | 3.2 | 3.2 | 2.8 | 2.8 | 1.1 | 3.2 | 3.6 | 2.5 | 3.6 | 2.4 | 3.3 | 2.6 | 3.6 | 3.1 | 0.9 | 1.8 | 3.5 | 3.1 | 2.7 | 1.9 | 3.6 | 3.3 | |
| IR64 | 0.8 | 0.2 | 0.3 | 0.3 | 2.9 | 0.1 | 1.5 | 3.9 | 0.3 | 0.2 | 2.0 | 0.1 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.9 | 0.2 | 0.1 | 3.2 | 0.3 | |
| IR62266 | 0.8 | 0.1 | 0.5 | 0.3 | 1.4 | 0.6 | 0.0 | 3.7 | 0.4 | 0.1 | 0.7 | 0.6 | 0.4 | 0.6 | 0.0 | 0.0 | 0.2 | 1.5 | 0.4 | 0.4 | 0.8 | 0.2 | |
| GM | 1.3 | 3.3 | 2.8 | 3.1 | 1.0 | 3.7 | 2.2 | 4.6 | 3.8 | 3.0 | 2.5 | 1.1 | 3.7 | 1.6 | 1.6 | 2.1 | 1.1 | 3.3 | 2.9 | 0.9 | 3.4 | 3.5 | |
| F-Test | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| % CV | 14.2 | 6.9 | 13.4 | 8.2 | 11.2 | 5.3 | 8.6 | 7.9 | 7.8 | 11.9 | 21.7 | 26.4 | 7.8 | 19.4 | 20.6 | 12.9 | 18.3 | 7.9 | 9.9 | 15.1 | 8.0 | 6.4 | |

Appendix Table 8. Analysis of Variance for 22 isolates were screened with 32 varieties based on 2 replications

| Rice blast isolates "LPDR" | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---------|---------|--------|--------|---------|---------|--------|--------|---------|--------|--------|--------|---------|--------|--------|--------|---------|--------|--------|---------|--------|---------|
| SV | Iso02 | Iso04 | Iso06 | Iso08 | Iso10 | Iso13 | Iso14 | Iso16 | Iso17 | Iso19 | Iso21 | Iso30 | Iso35 | Iso38 | Iso41 | Iso43 | Iso47 | Iso50 | Iso63 | Iso65 | Iso67 | Iso71 |
| Rep | 3.3ns | 7.14* | 2.1ns | 5.3* | 4.1ns | 4.8ns | 1.2ns | 0.1ns | 0.0ns | 0.1ns | 2.9ns | 0.1ns | 0.0ns | 2.9ns | 0.1ns | 0.0ns | 1.1ns | 5.2* | 0.0ns | 0.1ns | 4.9* | 2.9ns |
| Lines | 111.6** | 167.2** | 35.7** | 85.0** | 168.5** | 147.8** | 98.3** | 21.5** | 110.9** | 59.3** | 11.2** | 38.1** | 110.9** | 28.6** | 24.1** | 52.7** | 128.6** | 35.5** | 39.1** | 122.9** | 33.6** | 184.3** |
| Error | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 |

SV = Source of Variance

Rep = Replication

Vars = Varieties