**Table S1.** List of Indonesian *Vigna radiata* accessions and their geographical origins.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Entry no.a | Name | Landraces/varieties | Local origin |
| 1 | VR 5-1 | Arta Moseng | Landrace | West Java |
| 2 | VR 9-1 | Si Walik | Variety |  |
| 3 | VR 18-1 | Local Madura | Landrace | Madura |
| 4 | VR 25 | Arta Item | Landrace | West Java |
| 5 | VR 26 | Arta Ijo | Variety |  |
| 6 | VR 110 | Manyar | Variety |  |
| 7 | VR 116 | Bhakti | Variety |  |
| 8 | VR 129 | No. 129 | Variety |  |
| 9 | VR 137 | Nuri | Variety |  |
| 10 | VR 196 | Kenari | Variety |  |
| 11 | VR 217 | Betet | Variety |  |
| 12 | VR 218 | Gelatik | Variety |  |
| 13 | VR 219 | Parkit | Variety |  |
| 14 | VR 220 | Merpati | Variety |  |
| 15 | VR 222 | Walet | Variety |  |
| 16 | VR 224 | Camar | Variety |  |
| 17 | VR 423 | Merak | Variety |  |
| 18 | VR 961 | Calon Haji-1a | Landrace | West Nusa Tenggara |
| 19 | VR 963 | Samsek-a | Landrace | West Nusa Tenggara |
| 20 | VR 971 | Antap Ongko-1a | Landrace | West Nusa Tenggara |
| 21 | VR 980 | Local Bima-2a | Landrace | West Nusa Tenggara |
| 22 | VR 983 | Calon Haji Onko | Landrace | West Nusa Tenggara |
| 23 | VR 984 | Plastik | Landrace | North Maluku |
| 24 | VR 985 | Local Pasar Jailolo | Landrace | North Maluku |
| 25 | VR 986 | Local East Sumba  | Landrace | East Nusa Tenggara |
| 26 | VR 987 | Forewehal | Landrace | North Sulawesi |
| 27 | VR 989 | Fore Lotu | Landrace | North Sulawesi |
| 28 | VR 991 | Bue bura | Landrace | East Nusa Tenggara |
| 29 | VR 992 | Local Kota Kumbah-A | Landrace | East Nusa Tenggara |
| 30 | VR 994 | Local Kab. Borong-A | Landrace | East Nusa Tenggara |
| 31 | VR 997 | Nilon | Landrace | South Sulawesi |
| 32 | VR 1006 | Local Mutaha M-I | Landrace | South East Sulawesi |
| 33 | VR 1011 | Local Abuki | Landrace | South East Sulawesi |
| 34 | VR 1014 | Local Majenang-A | Landrace | Central Java |
| 35 | VR 1019 | Local Pangalengan | Landrace | West Java |

**Table S1.** Continued.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Entry no.a | Name | Landraces/varieties | Local origin |
| 36 | VR 1021 | Local Tarogong | Landrace | West Java |
| 37 | VR 1027 | Mentik Hitam | Landrace | Central Java |
| 38 | VR 1029 | PB-1 (Benggolo Pati) | Landrace | Central Java |
| 39 | VR 1031 | Local Kudus | Landrace | Central Java |
| 40 | VR 1041 | Local Ngawi | Landrace | East Java |
| 41 | VR 1043 | Local Pemeungpeuk | Landrace | West Java |
| 42 | VR 1045 | Butek Bungbulang | Landrace | West Java |
| 43 | VR 1047 | Local Kupang | Landrace | East Nusa Tenggara |
| 44 | VR 1051 | Butek Surade | Landrace | West Java |
| 45 | VR 1052 | Fore Belu | Landrace | East Nusa Tenggara |
| 46 | VR 1058 | Perkutut | Variety |  |
| 47 | VR 1060 | Tecer Hitam | Landrace | East Java |
| 48 | VR 1061 | Local Sampang-1 | Landrace | East Java |
| 49 | VR 1074 | Vima-1 | Variety |  |
| 50 | VR 1076 | Local Jerowaru | Landrace | West Nusa Tenggara |
| 51 | VR 1077 | Local Belu | Landrace | East Nusa Tenggara |
| 52 | VR 1079 | Local West Nusa Tenggara | Landrace | West Nusa Tenggara |
| 53 | VR 979 | Local Bima-1 | Landrace | West Nusa Tenggara |
| 54 | VR 988 | Kh.50 Hari (L.insana) | Landrace | South Sulawesi  |
| 55 | VR 1003 | Local Landa Baru | Landrace | Central Sulawesi  |
| 56 | VR 1005 | Local Mutaha- K2 | Landrace | Central Sulawesi  |
| 57 | VR 1025 | Local Garut M | Landrace | West Java |
| 58 | VR 1026 | Local Adnan Lubis | Landrace | Riau, Sumatra |
| 59 | VR 1028 | Mentik Coklat | Landrace | Central Java |
| 60 | VR 1032 | Local Pasar Welahan | Landrace | Central Java |
| 61 | VR 1037 | Local Sidamulih | Landrace | West Java |
| 62 | VR 1042 | Kuyak | Landrace | West Kalimantan  |
| 63 | VR 1048 | RR-2 | Landrace | West Java |
| 64 | VR 1054 | Local Pasar Kadipaten | Landrace | West Java |
| 65 | VR 1055 | Local Cirebon | Landrace | West Java |
| 66 | VR 1057 | Local Garut | Landrace | West Java |
| 67 | VR 1064 | Local Puda-1 | Landrace | Central Java |
| 68 | VR 1067 | Local Galis | Landrace | East Java |
| 69 | VR 1069 | Tecer Hijau | Landrace | East Java |
| 70 | VR 1070 | Arta Koneng | Landrace | East Java |
| 71 | VR 1071 | Local West Nusa Tenggara | Landrace | West Nusa Tenggara |

**Table S1.** Continued.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Entry no.a | Name | Landraces/varieties | Local origin |
| 72 | VR 1072 | Local Pasanggaran | Landrace | East Java |
| 73 | VR 1075 | Local Jonggat | Landrace | West Nusa Tenggara |
| 74 | No.exp.008 | Artha | Landrace | East Java |
| 75 | No. exp.28 | Fue Nutu | Landrace | East Nusa Tenggara |
| 76 | No. exp.34 | Foe Nutu | Landrace | East Nusa Tenggara |
| 77 | No.exp.47 | Utang Wewe | Landrace | East Nusa Tenggara |
| 78 | No.exp.75 | Kambe Morowisa | Landrace | East Nusa Tenggara |
| 79 | No.exp.76 | Kambe Kulita Kokana | Landrace | East Nusa Tenggara |
| 80 | No. exp.88 | Kabe Moro | Landrace | East Nusa Tenggara |
| 81 | No.exp.103 | Local Pasar Impres Bajawa | Landrace | East Nusa Tenggara |
| 82 | No.exp.104 | Local Bajawa Ngada | Landrace | East Nusa Tenggara |
| 83 | No.exp.131-2 | Local Pasar Embai Golewa Barat | Landrace | East Nusa Tenggara |

aEntry no.: Accession entry number in the ICABIOGRAD Genbank.

**Table S2.** List of SSR primers used in this study.

|  |  |  |  |
| --- | --- | --- | --- |
| No. | SSR motif | Forward (5'-3') | Reverse (5'-3') |
| SSR\_2 | (TAA)10 | CTGGAAAACATGAGGCGG | CGTGATGTGTGTCGTGGG |
| SSR\_3 | (CTT)12 | TGGGATCTTTGTTGCGTTT | TCGCCCTAACCAGTGACC |
| SSR\_6 | (AAG)11 | CTGGCAGCAAAGGAGGAA | GTGGAGGGTGGATGATGC |
| SSR\_7 | (GCT)10 | ACAGGACCACCACCAGGA | GTGGGAAGAAGCTGACGC |
| SSR\_13 | (ATA)23 | CATTATTTGGGCCCCCG | ATGCTCAAAATGGAACGAGAA |
| SSR\_14 | (AGA)12 | CAGCTCGAATGTGTTAGGGA | CGTTGCCATAATGAATGGG |
| SSR\_18 | (TTA)10 | CCGGTGGGTTACGGAAAG | TTTTCTAGGCCGGCAGTG |
| SSR\_20 | (AAT)18 | TGATCATGAGTGGCAAATCC | AAGCCTTCAGCCAAAAACTG |
| SSR\_21 | (ATA)23 | TGCAGTAAAAAGAATGGCAGA | GATGAGGGTTTCCATCGG |
| SSR\_24 | (TTC)10 | AGCACAAGGCCTACGACG | ACCAGGACCGATGACCAA |
| SSR\_26 | (TGA)15 | TGCAGAGTGGAAGGGAGG | TCAAACCATGCAAACTCACC |
| SSR\_31 | (TAT)10 | GGGATCTGCTTTTTCCCG | AAGGCATTGGGCAGATGA |
| SSR\_32 | (TTA)22 | AAGTTCTGGTCCCCTGTTACC | TTCATTGACATCTTTTGCGTG |
| SSR\_33 | (ATA)23 | CGTGAAGGGGTGTGTTGG | CCATGTTCTCGGTAATGGCT |
| SSR\_34 | (TCT)11 | CTGGCCATCCGTAGCATC | CGCTCGAGGAGATTGATGA |
| SSR\_35 | (ATA)10 | CCATACATCCCTCCCACG | ACCCCTCTCTCTTTGCCA |
| SSR\_38 | (ATT)11 | CCGCTTATAACTTAGGGACCA | TACGAAAGTGCGGGAAGG |
| SSR\_39 | (ATA)11 | GCCGACCTAAATAAGGACAAC | TTTTCTCAGCATGCTTCATCT |
| SSR\_44 | (TAA)14 | GATCCTCGCACCATCACC | AAAGGACCCCAGGGAATG |
| SSR\_49 | (ATT)16 | TTCATATGCAAAGGCATCAAA | AGCGCGAAAGAAAGGGAC |
| SSR\_51 | (GAA)10 | TGGTGTTGCTTTTGGGGT | CTTACACACCCACCATCGC |
| SSR\_59 | (AAT)13 | TTCAGCCACTAATTTCACGG | TCCACGCGCTCCTACTTC |
| SSR\_70 | (TTA)19 | TCCAACCCACTAAGCAGACA | TAAGCCCAACTCGATCCG |
| SSR\_71 | (AAG)10 | CCAAGCCACACAAGAGGTG | CCCCAACCAACCATCCTT |
| SSR\_74 | (TTA)19 | GCATCCCCAAAGTGCAAC | CAGTGCTGACTGCTACCCAG |
| SSR\_86 | (AAT)10 | AAAACGGGAACCATTTTGAA | GATGTCGTGAGCACTTGCAT |
| SSR\_87 | (ATA)27 | AGTTCGGTTTGGCACGAC | TTCGAATGTACACAACGCAA |
| SSR\_89 | (AAT)12 | AATCCCCTGTCTTGAGCATT | CCCATTCGGTATGATGCAC |
| SSR\_94 | (TTA)10 | GTGGTCGTGAAACCTGGG | AAAGGCTGCTGATTTCTGG |
| SSR\_95 | (AAT)19 | CTGAAAAGTTGCGGTTTTGT | CGTTTGTGAAGGTTGTGGAA |