Supplemental Table 1. Haploblocks in the world rice core collection and the rice core collection of Japanese landraces.

| Accession | Cultivar name | Haploblock | Accession | Cultivar name | Haploblock |
|-----------|---------------|------------|-----------|---------------|------------|
| WRC01     | Nipponbare    | 1          | WRC64     | PadiKuning    | 2          |
| WRC02     | Kasalath      | 2          | WRC65     | Ramhhog       | 2          |
| WRC03     | BeikKhe       | 2          | WRC66     | Bangala       | 2          |
| WRC04     | Jenal035      | 2          | WRC67     | Phadha        | 2          |
| WRC05     | Naba          | 2          | WRC68     | KhaoNamFen    | 2          |
| WRC06     | PuhukArang    | 2          | WRC97     | CharGalay     | 2          |
| WRC07     | Davalo        | 2          | WRC98     | DeelJoshuakko | 2          |
| WRC09     | RyonSusaKoumai| 2          | WRC99     | HongCheuhZai  | 2          |
| WRC10     | QinZaoZhong   | 2          | WRC100    | Vandaran      | 2          |
| WRC11     | Jingyuyn      | 2          | JRC01     | GaSun_Mochi   | 2          |
| WRC12     | DaHongGu      | 2          | JRC03     | Hinode        | 2          |
| WRC13     | Asu           | 2          | JRC04     | Senshou       | 2          |
| WRC14     | IR58          | 2          | JRC05     | Yamada_Bake   | 2          |
| WRC15     | Cs13          | 2          | JRC06     | Kaneku_B      | 1          |
| WRC16     | VersFutsi     | 2          | JRC07     | lrnma_Nishiki | 2          |
| WRC17     | Keiboba       | 2          | JRC08     | Okk_Modoshi   | 2          |
| WRC18     | Qingyu        | 2          | JRC10     | HiraYama      | 2          |
| WRC19     | DengPaoZhai   | 2          | JRC11     | Kahe           | 2          |
| WRC20     | Tadukan       | 2          | JRC12     | Oiran         | 2          |
| WRC21     | ShweNangGyi   | 2          | JRC13     | Bouzu_Mochi   | 1          |
| WRC22     | Caloxc        | 2          | JRC14     | Meguro_Mochi  | 1          |
| WRC23     | Lebed         | 2          | JRC17     | Akage         | 2          |
| WRC24     | Penadpot1     | 2          | JRC18     | HassoKohu     | 2          |
| WRC25     | Muha          | 2          | JRC19     | Wataribune    | 2          |
| WRC26     | Jhona2        | 2          | JRC20     | Hosogara      | 2          |
| WRC27     | NepalB        | 2          | JRC21     | Akamai_Kouchi | 2          |
| WRC28     | Jarjan        | 2          | JRC22     | Mansaku       | 2          |
| WRC29     | KaloDhan      | 2          | JRC23     | Ishigoro      | 3          |
| WRC30     | AnjanaDhan    | 2          | JRC24     | Joushu       | 1          |
| WRC31     | Shoni         | 2          | JRC25     | Dango        | 1          |
| WRC32     | Tupa121-3     | 2          | JRC26     | Akoku        | 1          |
| WRC33     | Surjamaddhi   | 2          | JRC27     | Ginbouzu     | uncategorized |
| WRC34     | ARC7291       | 2          | JRC28     | Shnri_Mochi  | 1          |
| WRC35     | ARC5955       | 2          | JRC29     | Shchinenchou_Mochi | 1 |
| WRC36     | Ratul         | 2          | JRC30     | Morita_Wase  | 3          |
| WRC37     | ARC7047       | 2          | JRC31     | Kamej        | 1          |
| WRC38     | ARC11094      | 2          | JRC32     | Omachi       | 1          |
| WRC39     | BasadiDhan    | 2          | JRC33     | Shnriki      | 1          |
| WRC40     | Nepal155      | 2          | JRC34     | Kyoutouasaahi| 1          |
| WRC41     | Kalhebarnati  | 2          | JRC35     | Kbashikou    | 1          |
| WRC42     | LocaBSamati   | 2          | JRC36     | Sekiyama     | 2          |
| WRC43     | Danyu1        | 1          | JRC37     | Shnyamadadoho_2 | 2 |
| WRC44     | Baslanon      | 2          | JRC38     | Nagoya_Shro  | 2          |
| WRC45     | Masho         | 2          | JRC39     | Shrome_Kemoni | 1          |
| WRC46     | KhasOkk       | 2          | JRC40     | Akamai_Nagasaki | 1 |
| WRC47     | Jaguury       | 1          | JRC41     | Akamai_Tokushima | 2 |
| WRC48     | KhauMacKho    | 2          | JRC42     | Touboshi     | 2          |
| WRC49     | PaddPerak     | 2          | JRC43     | Akamai_Kantou| 2          |
| WRC50     | Rexmont       | 2          | JRC44     | Karahoushi   | 2          |
| WRC51     | Urasan1       | 2          | JRC45     | Hyadayachtou | 2          |
| WRC52     | KhauTanChern  | 1          | JRC46     | Fukoku       | 1          |
| WRC53     | Tima          | 2          | JRC47     | Okabo        | 2          |
| WRC55     | Tupsa29       | 2          | JRC48     | Hakarmuri_Yokoyama | 2 |
| WRC57     | Mlyang23      | 2          | JRC49     | Rakaou_Rikun_2| 2 |
| WRC58     | NeangMenh     | 2          | JRC50     | Himenomochi  | 1          |
| WRC59     | NeangPhong    | 2          | JRC51     | Shanhsiao    | 1          |
| WRC60     | HaKphaPhhay    | 2          | JRC52     | Akaissahi    | 1          |
| WRC61     | RadmGuSesat   | 2          | JRC53     | Radlen       | 1          |
| WRC62     | Kernasun      | 2          | JRC54     | Houmanshinden_Ine | 3 |
| WRC63     | Bleiyo        | 2          |           |              |            |
### Supplemental Table 2. Haploblocks of Japanese landraces used in GWAS.

| Cultivar name | Origin  | Haploblock |
|---------------|---------|------------|
| ASAHI (1)     | Landrace| 1          |
| JIKKOKU       | Landrace| 1          |
| AIKOKU        | Landrace| 1          |
| ASAHI (2)     | Landrace| 1          |
| OBA           | Landrace| 2          |
| KAMEJI        | Landrace| 1          |
| KAMENOO       | Landrace| 2          |
| SHINRIKI      | Landrace| 1          |
| TAKENARI      | Landrace| 1          |
| AKAGE         | Landrace| 2          |
| MORITA-WASE   | Landrace| 3          |
| JYOSYU        | Landrace| 1          |
| SENICHI       | Landrace| 2          |
| GINBOUZU      | Landrace| 1          |
| RIKUU 20      | Landrace| 1          |
| KAMENOO 4     | Landrace| 2          |
| OMACHI        | Landrace| 1          |
| SEKITORI      | Landrace| 2          |
| BOZU          | Landrace| 2          |
| SHIROSENBON   | Landrace| 1          |