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|  | Varietal background | Name | How | Target | AC %\*  RS %\* | Reference |
| Rice  (Oryza sativa) | Taichung 65(J\*-Wxb)  Kinmaze (J\*\*-Wxb) | #1403 | Mutagenesis | *SBEI/SBEIIb* | 51.7 (21.1)  35.1 (0.2) | Miura et al., 2021 |
| Ilpumbyeo (J\*\*) | *Goami2*  *Suweon 464* | Mutagenesis | - | 34 (18)  - | Kang et al., 2003 |
| Nipponbare (J\*\*) | *e1* | Mutant | *SSIIIa* | 30.7 (21.2) | Fujita et al., 2007 |
| Kinmaze (J\*\*) | - | Mutant | *-* | 29-34 (17)  - | Yano et al., 1985 |
| Kinmaze (J\*\*) | EM10 | Mutant | *SBEIIb* | 28.1 (21.6)  11.6 (0.2) | Nishi et al., 2001 |
| - | - | Mutant | *SS1/SSIIIa* | 33 (21)  - | Fujita et al., 2011 |
| Nipponbare | - | hp-RNA silencing | *SBEIIb* | 41.2 (19.6)  4.8 (-) | Butardo et al., 2011 |
| (I\*\*-Wxa) | HA-1 HA-2 | RNA-i | *SBEI/SBEIIb* | 64.8 (27.2)  14.6 (-) | Zhu et al., 2012 |
| Kitaake (J\*\*) | - | CRISPR-Cas9 | *SBEIIb* | 25 (15)  9.8 (0.1) | Sun et al., 2017 |
| Kinmaze (J\*\*) | - | Mutant | *SSIIIa/SBEIIb* | 45.1 (21)  - | Asai et al., 2014 |
| Mais  (Zea mays) | H99ae, OH43ae, B89ae, B84ae | amylose extender (ae) | Mutant | *SBEIIb* | 61-68 8 (-)  18.6-20.9 (-) | Li et al., 2008*b* |
| GUAT209:S13 × (OH43ae × H99ae)] |  | Mutant | *SBEIIb-SBEI* | 68.9-88.2 (-)  39.4–43.2 (-) | Li et al., 2008*b* |
| Standard line x Mutator line | sugary 2 (su2) | Mu transposable element | *SSIIa* | 38-40 (26)  - | Zhang et al., 2004 |
| Oh43 Inbred Line | dull1 (du1) | Mutant | *SSII* | 31.4 (27.8)  - | Wang et al., 1993 |
| Oh43 Inbred Line | sugary 1 (su1) | Mutant | *ISA1* | 37.4 (27.8)  - | Wang et al., 1993 |
| Oh43 Inbred Line | ae du1 | Mutant | *SBEIIb-SSII* | 57.8 (27.8)  - | Wang et al., 1993 |
| Oh43 Inbred Line | du1 su1 | Mutant | *SSII-ISA1* | 39.9 (27.8)  - | Wang et al., 1993 |
| Barley  (*Hordeum vulgare*) | Glacier | *amo1* Glacier AC38 | Mutant | *amo1* | 37.4 (25.7)  - | Banks et al., 1971; Yoshimoto et al., 2000 |
| Himalaya | *Sex6* Himalaya 292 | Mutagenesis | *SSIIa* | 59 (32)  1.9 (-) | Morell et al., 2003 |
| GlacierAC38/Himalaya292 | *Sex6 /amo1* | Mutagenesis | *SSIIa/amo1* | 61 (32)  3.4 (1.2) | Li et al., 2011 |
| Golden Promise | - | RNA-i | *SBEIIa/SBEIIb* | 69.4 (31.4)  6.3 (0.2) | Regina et al., 2010 |
| Golden Promise | - | RNA-i | *SBEIIa/SBEIIb/SBEI* | 99 (29)  90 (-) | Carciofi et al., 2012 |
| Bread Wheat  (*Triticum aestivum*) | Chousen30  Kanto79  Turkey116 | SGP1 null | Natural mutant | *SSIIa* | 37.3 (29.6)  3.64 (0.02) | Yamamori et al., 2000; Yamamori et al., 2006 |
| Cadenza | Cad SSIIa\* | Mutagenesis | *SSIIa* | 45.7 (34.0)  1.4 (0.2) | Botticella et al., 2018 |
| Jagger | Jag-ssiia-∆ABD | TILLING | *SSIIa* | 35.7 (31.1)  2.21 (1.0) | Schoen et al., 2021 |
| Express | - | TILLING | *SBEIIa* | 55.7 (22.9)  6.5 (0.8) | Slade et al., 2012 |
| Cadenza | Cad-SBEIIa | TILLING | *SBEIIa* | 78.7(34.0)  7.2 (0.2) | Botticella et al., 2011; Botticella et al., 2018 |
| Zhengmai7698 (winter) | ZM Mutant | CRISPR/CAS9 | *SBEIIa* | 65.4 (30.6)  6.6 (1.2) | Li et al., 2020 |
| Bobwhite (spring) | Bobwhite Mutant | 69.7 (30.6)  8.7 (1.8) |
| Express/Chara | A1B2nD2 | Physical Mutagenesis /TILLING | *SBEIIa/SBEIIb* | 84.4 (29.6)  16.6 (0.9) | Regina et al., 2015 |
| Express | - | TILLING | *SBEIIa/SBEIIb* | 63.8 (36.7)  - | Li et al., 2019 |
| Durum Wheat  (*Triticum durum*) | Mountrail | - | (Natural mutants/EMS mutagenesis) | *SSIIa* | 44.3 (28.7)  - | Hogg et al., 2013 |
| Svevo | - | Natural mutant | *SSIIa* | 46.0 (31.0)  3.0 (0.4) | Botticella et al., 2016 |
| Kronos | - | TILLING | *SBEIIa* | 47.4 (24.4)  6.2 (1.6) | Slade et al., 2012 |
| Kronos | - | TILLING | *SBEIIa* | 28 (23)  1 (0.4) | Hazard et al., 2012 |
| Svevo | - | TILLING | *SBEIIa* | 54.4 (26.9)  6.5 (0.8) | Sestili et al., 2015 |
| Svevo | MJ16-112 | RNAi | *SBEIIa* | 75.0 (24.5)  - | Sestili et al., 2010*b* |
| Ofanto | A428 | 56.4 (30.9)  - |
| Kronos | - | TILLING | *SBEIIa/SBEIIb* | 40.1 (26.6)  3.7 (0.5) | Hazard et al., 2014 |

\*I, Indica; J, Japonica; SSIIa from japonica rice cultivars contains four amino acid replacements compared with indica rice cultivars and three of these are associated with significant reduction in japonica SSIIa activity ([Nakamura et al., 2005](https://www.frontiersin.org/articles/10.3389/fpls.2018.00645/full#B23))

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