**Table S1.** Accession code and locality of plant materials used in this study

|  |  |
| --- | --- |
| Accession | Locality |
| Sh 22 | SW: Chaharmahal va Bakhtiari; Ardal toward Lordegan, 50˚38ˈ E, 32˚01ˈ N, Alt. 1849 m |
| Sh 29 | SW: Chaharmahal va Bakhtiari; Farrokh-Shahr toward Dastgerd, 50˚59ˈ E, 32˚15ˈ N,  |
| Sh 79 | SW: Isfahan; Bagh-Bahadoran toward Shahre-kord, 51˚14ˈ E, 32˚22ˈ N, Alt. 1794 m |
| Sh 30 | SW: Chaharmahal va Bakhtiari; Sodejan toward Kohrang, 50˚21ˈ E, 32˚32ˈ N, Alt. 2164 m |
| Sh 42 | SW: Lorestan; Doroud toward Boroujerd, 48˚52ˈ E, 33˚44ˈ N, Alt. 1521 m |
| Sh 39 | W: Hamedan; Gerdekan toward Nahavand, 48˚23ˈ E, 34˚04ˈ N, Alt. 1808 m |
| Sh 83 | W: Ilam; Poldokhtar toward Dareshahr, 47˚28ˈ E, 33˚05ˈ N, Alt. 654 m |
| Sh 47 | W: Ilam; Chovar toward Ivan, 46˚23ˈ E, 33˚35ˈ N, Alt. 1013 m |
| Sh 53 | W: Kermanshah; Kermanshah toward Kamyaran, 47˚06ˈ E, 34˚21ˈ N, Alt. 1328 m |
| Sh 54 | W: Kermanshah; Kamyaran, 46˚55ˈ E, 34˚45ˈ N, Alt. 1430 m |
| Sh 88 | W: Kermanshah; Kamyaran toward Sanandaj, 46˚55ˈ E, 34˚45ˈ N, Alt. 1430 m |
| Sh 56 | W: Kordestan; Kavaneh toward Sanandaj, 46˚59ˈ E, 35˚12ˈ N, Alt. 1371 m |
| Sh 59 | W: Kordestan; Divandarreh, 47˚01ˈ E, 35˚54ˈ N, Alt. 1845 m |
| Sh 61 | W: Kordestan; Saghez toward Baneh, 45˚53ˈ E, 36˚00ˈ N, Alt. 1579 m |
| Sh 62 | W: Azerbayjan-Gharbi; Saghez toward Boukan, 46˚13ˈ E, 36˚31ˈ N, Alt. 1392 m |
| Sh 64 | NW: Azerbayjan-Gharbi; Orumia toward Silvaneh, 44˚51ˈ E, 37˚25ˈ N, Alt. 1615 m |
| Sh 68 | NW: Azerbayjan-Shargi; Khosroshahr toward Tabriz, 46˚02ˈ E, 37˚57ˈ N, Alt. 1367 m |
| Sh 69 | C: Zanjan; Tabriz toward Zanjan, 47˚49ˈ E, 37˚07ˈ N, Alt. 1160 m |
| Sh 70 | C: Zanjan; near the city of Zanjan, 48˚40ˈ E, 36˚35ˈ N, Alt. 1775 m |
| Sh 71 | C: Ghazvin; Zanjan toward Ghazvin, 49˚50ˈ E, 36˚11ˈ N, Alt. 1287 m |
| Sh 72 | C: Karaj; Ghazvin toward Karaj, Abyek, 50˚10ˈ E, 36˚14ˈ N, Alt. 1353 m |
| Sh 75 | C: Tehran; Karaj toward Tehran, Tehran, 51˚20ˈ E, 35˚41ˈ N, Alt. 1197 m |
| Sh 21 | C: Ghom; Saveh toward Salafchegan, 50˚23ˈ E, 34˚45ˈ N, Alt. 1175 m |
| Sh 77 | C: Isfahan; Qom toward Kashan, 51˚ 18ˈ E, 34˚ 04ˈ N, Alt. 971 m |
| Sh 78 | C: Isfahan; Natanz toward Isfahan, 51˚57ˈ E, 33˚23ˈ N, Alt. 1650 m |
| Sh 82 | C: Yazd; Yazd toward Shahedieh, about 5 km, 54˚28ˈ E, 31˚94ˈ N,  |
| Sh 12 | N.EC: Golestan; Gorgan toward Golestan National Park, 55˚44ˈ E, 37˚24ˈ N, Alt. 400 m |
| Sh 10 | N.EC: Goleastan; Gorgan toward Azadshahr, 54˚41ˈ E, 35˚53ˈ N, Alt. 110 m |
| Sh 7 | N.EC: Mazandaran; Sari toward Behshahr, 53˚14ˈ E, 36˚36ˈ N, Alt. 95 m |
| Sh 5 | N.EC: Mazandaran; Babol toward Sari, 52˚40ˈ E, 36˚32ˈ N, Alt. 15 m |
| Sh 8 | N.EC: Mazandaran; Behashahr toward Sari, 27 km, 53˚ 13 E, 36˚36 N, Alt. 45 m  |
| Sh 15 | N.WC: Mazandaran; Nour toward Noshahr, near Chalous, 51˚31ˈ E, 36˚39ˈ N, Alt. - 8 m |
| Sh 16 | N.WC: Mazandaran; Tonekabon toward Ramsar, 51˚00ˈ E, 36˚46ˈ N, Alt. 23 m |
| Sh 81 | N.WC: Mazandaran; Tonekabon toward Nashtaroud, 51˚00ˈ E, 36˚46ˈ N, Alt. 23 m |
| Sh 17 | N.WC: Mazandaran; Tonekabon toward Ramsar, 50˚55ˈ E, 36˚48ˈ N, Alt. - 20 m |
| Sh 18 | N.WC: Gilan; Lahijan toward Rasht, 50˚00ˈ E, 37˚13ˈ N, Alt. - 10 m |
| Sh 19 | N.WC: Gilan; Sangar toward Roudbar, 49˚41ˈ E, 37˚10ˈ N, Alt. 36 m |
| Sh 20 | N.WC: Gilan; Rasht toward Roudbar, about 20 km, 49˚32ˈ E, 36˚56ˈ N, Alt. 129 m |
| Sb 14 | N.EC: Mazandaran; Fereydoun-Kenar toward Sorkh-Rood, 52˚25ˈ E, 36˚35ˈ N, Alt. 23 m |
| Sb 85 | N.EC: Mazandaran; Babol, 52˚39ˈ E, 36˚32ˈ N, Alt. 15 m |