Supplement Table 1. Morphological variations of 183 accessions of cultivated *P. frutescens* var. *frutescens* of *Perilla* crop for 11 qualitative and quantitative traits in the five regions of South Korea and other region.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Morphological  Character | G1 (Gyeonggi-do)  (N=19) | G2 (Gangwon-do)  (N=13) | G3 (Chungcheong-do)  (N=19) | G4 (Jeolla-do)  (N=31) | G5 (Gyongsang-do)  (N=62) | G6 (other region)  (N=39) | Total (N=183) |
| QL1 | 1 (4\*), 2 (6), 3 (9) | 2 (11), 3 (2) | 1 (1), 2 (5), 3 (13) | 1 (4), 2 (17), 3 (10) | 1 (9), 2 (34), 3 (19) | 1 (4), 2 (27), 3 (8) | 1 (22), 2 (100), 3 (61) |
| QL2 | 1 (11), 2 (8) | 1 (4), 2 (7), 3 (2) | 1 (10), 2 (8), 3 (1) | 1 (10), 2 (19), 3 (2) | 1 (20), 2 (37), 3 (5) | 1 (10), 2 (24), 3 (5) | 1 (65), 2 (103), 3 (15) |
| QL3 | 1 (4), 2 (6), 3 (9) | 2 (11), 3 (2) | 1 (1), 2 (5), 3 (13) | 1 (4), 2 (17), 3 (10) | 1 (9), 2 (34), 3 (19) | 1 (4), 2 (27), 3 (8) | 1 (22), 2 (100), 3 (61) |
| QL4 | 1 (2), 3 (14), 4 (3) | 3 (10), 4 (3) | 1 (2), 3 (7), 4 (10) | 1 (5), 3(19), 4 (7) | 1 (4), 2 (5), 3 (34), 4 (19) | 1 (4), 2 (3), 3 (31), 4 (1) | 1 (17), 2 (8), 3 (115), 4 (43) |
| QL5 | 1 (7), 2 (8), 3 (4) | 1 (5), 2 (8) | 1 (8), 2 (8), 3 (3) | 1 (19), 2 (11), 3 (1) | 1 (41), 2 (16), 3 (5) | 1 (17), 2 (19), 3 (3) | 1 (97), 2 (70), 3 (16) |
| QL6 | 1 (7), 2 (12) | 1 (7), 2 (5), 3 (1) | 1 (6), 2 (13) | 1 (12), 2 (19) | 1 (30), 2 (32) | 1 (10), 2 (27), 3 (2) | 1 (72), 2 (108), 3 (3) |
| QL7 | 1 (17), 2 (2) | 1 (8), 2 (5) | 1 (18), 2 (1) | 1 (31) | 1 (62) | 1 (39), 2 (1) | 1 (174), 2 (9) |
| QL8 | 1 (18), 2 (1) | 1 (13) | 1 (16), 2 (3) | 1 (29), 2 (2) | 1 (54), 2 (8) | 1 (37), 2 (2) | 1 (167), 2 (16) |
| QN1 | 1 (7), 2 (4), 3 (4),  4 (2), 5 (2) | 2 (8), 3 (2), 4 (3) | 1 (5), 2 (6), 3 (5),  4 (2), 5 (1) | 8 (8), 9 (11), 10 (11), 11 (1) | 8 (18), 9 (22), 10 (15), 11 (4), 12 (2), 13 (1) | 8 (12), 9 (18), 10(6), 11 (1), 12 (1), 13 (1) | 8 (50), 9 (69), 10 (43), 11 (13), 12 (6), 13 (6) |
| QN2 | 1 (1), 2 (1), 3 (1),  4 (5), 5 (9), 6 (1), 7 (1) | 2 (1), 3 (1), 4 (5),  5 (1), 6 (3), 7 (2) | 1 (1), 2 (1), 3 (5),  4 (4), 5 (6), 6 (1), 7 (1) | 2 (4), 3 (4), 4 (10),  5 (9), 6 (3), 7 (1) | 1 (3), 2 (4), 3 (11),  4 (18), 5 (11), 6 (10),  7 (5) | 1 (1), 2 (12), 3 (6),  4 (11), 5 (6), 6 (1),  7 (2) | 1 (6), 2 (23), 3 (28),  4 (53), 5 (42), 6 (19),  7 (12) |
| QN3 | 2 (14), 3 (5) | 2 (10), 3 (3) | 2 (10), 3 (9) | 2 (20), 3 (11) | 2 (30), 3 (32) | 2 (20), 3 (19) | 2 (104), 3 (79) |

\* The number of individuals in the 183 accessions of *P. frutescens* var. *frutescens* of *Perilla* crop for each morphological trait type.