

Table S3. Segregation analysis of the Fe overaccumulation trait in the F2 plants issuing from a cross between Shahdara and *frd3-7*.

| Genotype ^a | Number of plants showing | | χ_2 test ^c |
|---|--|------------------------------------|----------------------------|
| | Fe overaccumulation in stele ^b | No Fe overaccumulation in stele | |
| All F2 plants | 14 | 44 | 0.02 |
| <i>frd3/frd3</i> | 9 | 2 | |
| <i>frd3/FRD3</i> ^{Sha} | 5 | 34 | |
| <i>FRD3</i> ^{Sha} / <i>FRD3</i> ^{Sha} | 0 | 8 | |

a. Genotype determined for the presence or absence of T-DNA using primers LBb1 and FRD3exon12R or FRD3exon7F and FRD3exon12R, respectively.

b. Fe overaccumulation is visualized by Perls' stain [21] of intact roots of plants grown on compost for 3 weeks.

c. χ_2 analysis of the segregation of Fe overaccumulation trait in the F2 progeny, H0 hypothesis was that this trait is under the control of one monogenic recessive locus.