

S2 Table. Summary of the χ^2 test in nuclear families after ascertainment correction. This is under the hypothesis of independent transmission.

| Parent Pheno. | Parent pairs | Obs. No. | | Exp. No. | | χ^2 | P-value |
|-------------------------|--|----------|----|----------|------|----------|-----------------------|
| | | WG | BB | WG | BB | | |
| WG, BB | (103, 104), (107, 108), (111, 112), (201, 202), (305, 306), (311, 312), (313, 314) | 7 | 5 | 8.16 | 3.84 | 0.52 | 0.47 |
| BB, BB | (120, 121), (122, 123), (315, 316), (405, 406) | 0 | 5 | 3.4 | 1.6 | 10.63 | 0.001 |
| WG, WG | (105, 106), (203, 204), (307, 308), (401, 402), (403, 404), (407, 408) | 6 | 3 | 6.12 | 2.88 | 0.007 | 0.59 |
| BB, missing | (113, 114), (301, 302), (303, 304), (309, 310) | 3 | 6 | 6.12 | 2.88 | 4.97 | 0.03 |
| Total Chi-square | | | | | | 16.12 | 1.10×10^{-3} |

Pheno = Phenotype; Obs. No.= Observed number; Exp.No.= Expected number; WG: white-gold; BB: blue-black.