

Table S1. Primers used to study the structure of the *Vrn-D1*, *ZCCT-D1*, *ZCCT-D2* and *Ppd-D1* genes.

| Primer name        | Primers sequence       | Target sequence                                     | Annealing Temp. °C | Product Size (bp) | Reference          |
|--------------------|------------------------|---|--------------------|-------------------|--------------------|
| AetVrn-D1_Intr1F1  | TGTCTGCCTCATCAAATCCGTG | <i>Vrn-D1</i> intron 1 with 5437 bp deletion        | 62                 | 747               | [62]               |
| AetVrn-D1_Intr1R1  | AGGATTGAAGCGAGAGCAGAGG |   |                    |                   |                    |
| AetVrn-D1_Intr1F2  | GTTGTCTGCCTCATCAAATCC  | <i>Vrn-D1</i> intron 1 without deletion             | 61                 | 998               | [62]               |
| AetVrn-D1_Intr1R2  | AAATGAAAAGGAACGAGAGCG  |   |                    |                   |                    |
| AetVrn-D1_Intr1F3  | ACAGACCACCACTGACCGAC   | <i>Vrn-D1</i> intron 1 for new deletion             | 62                 | 275               | Current study [62] |
| AetVrn-D1_Intr1R1  | AGGATTGAAGCGAGAGCAGAGG |   |                    |                   |                    |
| Ex1/C/F            | GTTCTCCACCGAGTCATGGT   | <i>Vrn-D1</i> intron 1 for new deletion             | 62                 | 3500              | [11]               |
| AetVrn-D1_Intr1R1  | AGGATTGAAGCGAGAGCAGAGG |   |                    |                   |                    |
| AetZCCT-D1_Intr1F1 | AGTTGTTATCTTCCGCTGTC   | <i>ZCCT-D1</i> intron 1 with 24 bp deletion         | 61                 | 302 or 278        | Current study      |
| AetZCCT-D1_Intr1R1 | CTCTCCTGCATTGTGGGATA   |   |                    |                   |                    |
| AetZCCT-D2_Ex2F1   | ACTGTGTGCTTCTTTGGACAC  | <i>ZCCT-D2</i> exon 2 with 1 bp deletion            | 63                 | 539 or 538        | Current study      |
| AetZCCT-D2_Ex2R1   | TACCGGAACCATCCGAGG     |   |                    |                   |                    |
| Ppd-D1_F           | ACGCTCCCACTACACTG      | <i>Ppd-D1</i> promoter region with 2089 bp deletion | 54                 | 454 or 228        | [37]               |
| Ppd-D1_R1          | GTTGGTTCAAACAGAGAGC    |   |                    |                   |                    |
| Ppd-D1_R2          | CACTGGTGGTAGCTGAGATT   |   |                    |                   |                    |

Table S2. Primers used to analyze the expression level of the *Vrn-D1* gene.

| Primer name   | Primers sequence         | Primer efficiency | Annealing Temp. °C | Reference     |
|---------------|--------------------------|-------------------|--------------------|---------------|
| qAetVrn-D1_F4 | GCTCTTCTTCTTCTTCCTTCAT   | 90,93%            | 63                 | Current study |
| qAetVrn-D1_R4 | GGCTCACCATCCACAGT        |                   |                    |               |
| qAetGAPDH_F1  | TTCGGAATCGTGAAGGGGAC     | 90,67%            | 63                 | Current study |
| qAetGAPDH_R1  | CTCGTTGGCACGATGTTTCAG    |                   |                    |               |
| qSAMDC_F      | TACTTCACAGCCGATAGC       | 93,44%            | 63                 | [72]          |
| qSAMDC_R      | CCGATTGTTGGACGATACT      |                   |                    |               |
| qACTIN_F      | ATGGAAGCTGCTGGAATCCAT    | 107,4%            | 63                 | [25]          |
| qACTIN_R      | CCTTGCTCATACGGTCAGCAATAC |                   |                    |               |