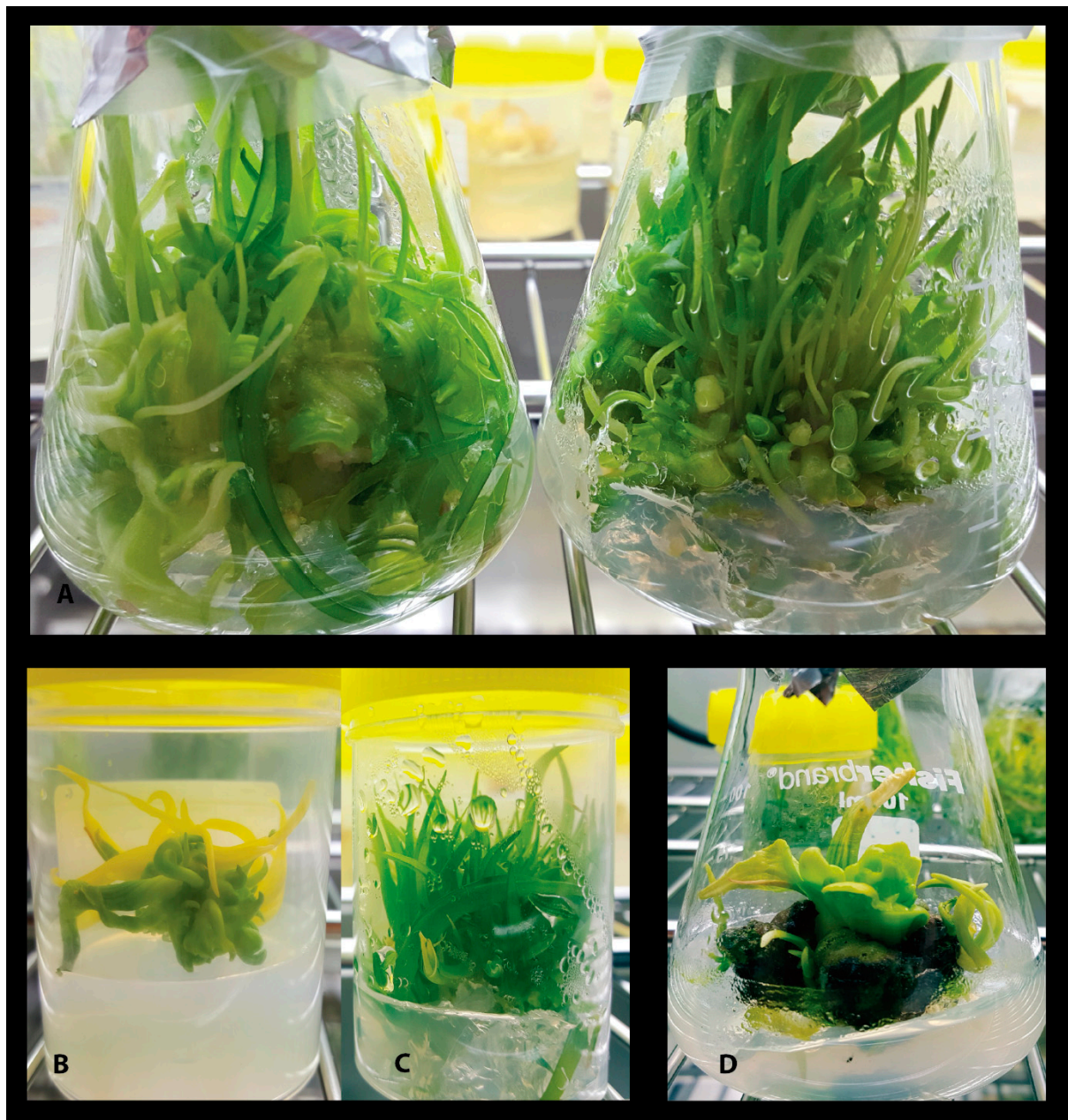


## Supplementary materials

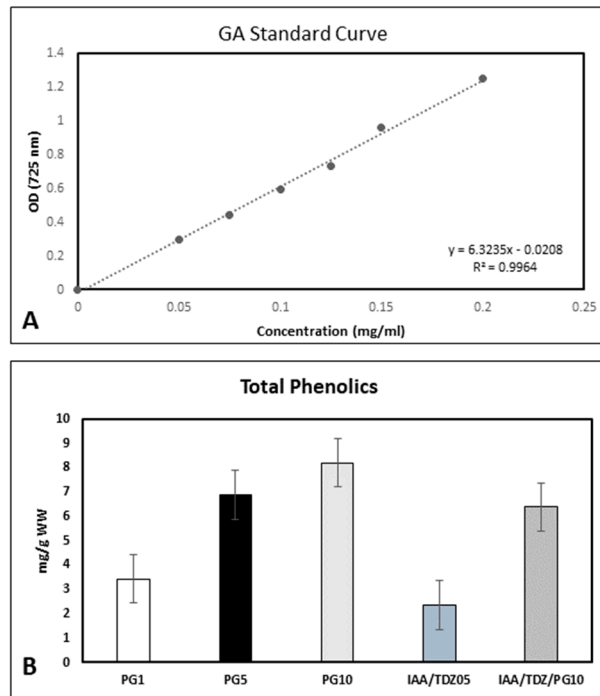
This document contains: Supplementary Table 1 describing the primers used for the genetic characterisation of selected lines and 5 supplementary figures.

**Table S1.** RAPD primers sequences used in the genetic characterization of selected variants.

| Primer Name | Primer sequence (bp) |
|-------------|----------------------|
| S21         | CAGGCCCTTC           |
| S22         | TGCCGAGCTG           |
| S23         | AGTCAGCCAC           |
| S24         | AATCAGCCAC           |
| S25         | AGGGGTCTTG           |
| S26         | GGTCCCTGAC           |
| S27         | GAAACGGGTG           |
| S28         | GTGACGTAGG           |
| S29         | GGGTAACGCC           |
| S30         | GTGATCGCAG           |
| S31         | CAATCGCCGT           |
| S32         | TCGGCGATAG           |
| S33         | CAGCACCCAC           |
| S34         | TCTGTGCTGG           |
| S35         | TTCCGAACCC           |
| S36         | AGCCAGCGAA           |
| S37         | GACCGCTGTT           |
| S38         | CAAACGTCGG           |
| S39         | AGGTGACCGT           |
| S40         | GTTGCGATCC           |



**Figure S1.** Morphological characterisation of different clumps of developing plantlets of *O. dubium*. In A, IAA+TDZ (1.0/1.0 mg/l). In B IAA+TDZ plus PG2. In C IAA+TDZ and Kin and in D shoot formation of *Hyacinthus orientalis* under similar conditions and used as an outsider in the tissue culture experiments.



**Figure S2.** In Panel A, standard curve generated using Gallic Acid (GA) as monomeric phenolic. In panel B, total phenolics evaluation under PG and IAA/TDZ and IAA/TDZ+PG treatments. (WW: wet weight).

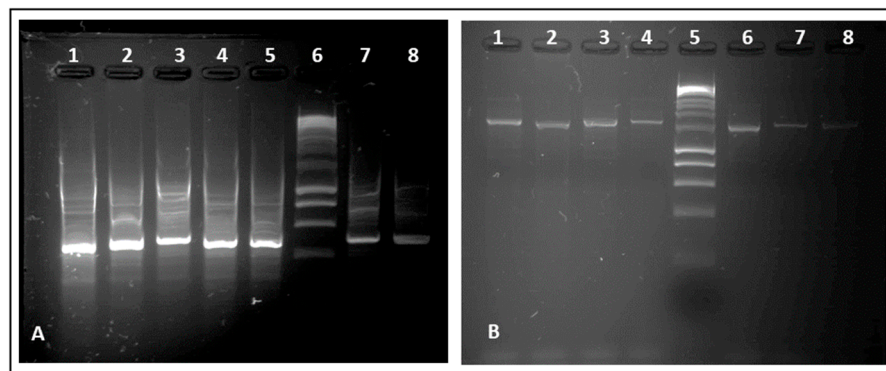


**Figure S3.** Morphological characteristic of the *O. dubium* leaf variegation variant. In B the typical morphology of a variegation variant as compared to a normal developed plant and leaf in A.





**Figure S4.** Plant Phenotyping of selected *Ornithogalum dubium* lines showing various morphological alteration of the flower development of *O. dubium*. Increase in petals and stamens (in Panels B, C, D and G), green phenotype (in Panel F) and leafy pedunculated pistil (in panel G). In Panel E, normally developed bulbs of various sizes.



**Figure S5.** In A an example of a polymorphic primer (S24) applied to 7 variants. In B an example of a non-polymorphic primer (S25) applied to 7 variants. Lane 1: normal phenotype, 2: Variegated sample; 3: Micro-leaves sample; 4: Phloroglucinol induce, large sample; 5: Mixed coloured flowers; 6: 100 bp ladder and 7: green flower sample and 8: *flore pleno* sample