Supplementary table 1

**Analysis of seeds, pod and L- DOPA yields in selected variants compared to control of *M. pruriens* M1 generation as obtained during field assessment.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***M. pruriens* accessions** | **Total number of Clusters/plant** | **Average number of Pods / Cluster** | **Total weight of dry pods/plant (gm)** | **Total number of seeds/plant** | **Total seed weight/plant (gm)** | **L-DOPA % in seeds**  |
| **Control** | **95** | **2.794** | **992** | **440** | **520** | **3.18** |
| **T-I-7** | **57** | **4.833** | **2430** | **1250** | **1460** | **5.70** |
| **T-I-8** | **8** | **3.452** | **160** | **76** | **100** | **3.49** |
| **T-I-16** | **1** | **3.22** | **40** | **20** | **22** | **4.08** |
| **T-I-19** | **2** | **4.00** | **45** | **38** | **42** | **3.41** |
| **T-I-22** | **0** | **0.0** | **55** | **39** | **43** | **3.33** |
| **T-I-23** | **1** | **3.0** | **30** | **18** | **20** | **3.10** |
| **T-II-16** | **51** | **3.07** | **1491** | **531** | **725** | **3.11** |
| **T-II-23** | **17** | **4.66** | **586** | **430** | **510** | **4.15** |
| **T-III-14** | **17** | **2.227** | **460** | **195** | **280** | **3.28** |
| **T-IV-9** | **98** | **4.927** | **3434.8** | **1749** | **1900** | **4.75** |
| **T-IV-11** | **23** | **2.7** | **534** | **246** | **225** | **3.47** |
| **T-VI-1** | **68** | **3.557** | **2167** | **1262** | **1400** | **4.91** |
| **T-VI-10** | **55** | **3.214** | **1838** | **861** | **1140** | **3.82** |
| **T-VI-14** | **72** | **2.802** | **2209** | **894** |  **1060** | **3.45** |
| **Mean ± SE** | **37.666±9.052** | **3.230±0.312** | **1098.120±281.569** | **536.6±141.49** | **629.8±159.981** | **3.815±0.198** |
| **Range**  | **0.000-98** | **0.000-4.927** | **30.0-3434.8** | **18.0-1749.0** | **20.0-1900** | **3.10-5.70** |
| **t value** | **10.360\*\*** | **10.360\*\*** | **3.9\*\*** | **3.792\*\*** | **3.937\*\*** | **19.233\*\*** |

Supplementary table 2

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Name of primer** | **Sequence of primer in 5`-3`** |
| 1 | MAP 1 | **AAATCGGAGC** |
| 2 | MAP2 | **GTCCTACTCG** |
| 3 | MAP 3 | **GTCCTTAGCG** |
| 4 | MAP 4 | **TGCGCGATCG** |
| 5 | MAP 5 | **AACGTACGCG** |
| 6 | MAP 6 | **GCACGCCGGA** |
| 7 | MAP 7 | **CACCCTGCGC** |
| 8 | MAP 8 | **CTATCGCCGC** |
| 9 | MAP 9 | **CGGGATCCGC** |
|  10 | MAP 10 | **GCGAATTCCG** |
|  11 | MAP11 | **CCCTGCAGGC** |
|  12 | MAP 12 | **CCAAGCTTGC** |
|  13 | MAP 13 | **GTGCAATGAG** |
|  14 | MAP 14 | **AGGATACGTG** |
|  15 | MAP 15 | **AAGATAGCGG** |
|  16 | MAP 16 | **GGATCTGAAC** |
|  17 | MAP 17 | **TTGTCTCAGG** |
|  18 | MAP 18 | **CATCCCGAAC** |
|  19 | MAP 19 | **GGACTCCACG** |
|  20 | MAP 20 | **AGCCTGACGC** |

Supplementary table 3

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Primer** | **Sequences (5`-3`)** |
| **1** |  **OPB-8** | **GTCCACACGG** |
| **2** | **OPB 8-1** | G**A**CCACACGG |
| **3** | **OPB 8-2** | GT**G**CACACGG |
| **4** | **OPB 8-3** | GTC**G**ACACGG |
| **5** | **OPB 8-4** | GTCC**T**CACGG |

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Name of primer** | **Sequence of primer in 5`-3`** |
| 1 | DDC Forward  | CAAGTTGGGAAGGAGAAGATAGG |
| 2 | DDC Reverse | CAATGGTCCCACAGGATCA |
| 3 | 18s Forward | CCTTCGGGATCGGAGTAATG |
| 4 | 18s Reverse  | AGCCCCCAACTTTCGTTCTT |

Supplementary table 4