**Table S5** Microsatellites loci in *Withania somnifera*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Repeats** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **total** |
| A | - | - | - | - | 67 | 23 | 9 | 9 | 2 | 1 | 1 |  |  |  |  | 112 |
| C | - | - | - | - | 11 | 1 |  |  |  |  |  |  |  |  |  | 12 |
| G | - | - | - | - | 7 |  | 1 |  |  |  |  |  |  |  |  | 8 |
| T | - | - | - | - | 66 | 25 | 11 | 15 | 4 | 2 | 2 | 1 | 1 | 1 | 1 | 129 |
| AC | - | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| AG | - | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| AT | - | 10 | 3 |  |  |  |  |  |  |  |  |  |  |  |  | 13 |
| CT | - | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| GA | - | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| TA | - | 8 | 3 |  |  |  |  |  |  |  |  |  |  |  |  | 11 |
| TC | - | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| AAC | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| AAG | 4 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| AAT | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| ACT |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| AGA | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| ATA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| ATC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| ATG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| ATT | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |
| CAA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CAG | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| CCT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTT | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| GAA | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| GAG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GAT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GCT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GGA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GTG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GTT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TAA | 3 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| TAG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TAT | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| TCA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TCG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TCT | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| TGA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TGC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TGG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTA | 5 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 6 |
| TTC | 6 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 7 |
| TTG | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| AAAC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTAT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TATT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTTG | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| ATTAT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTTTTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

**Table S5a** Microsatellites loci in *Withania coagulans*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Repeats** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **total** |
| A | - | - | - | - | 67 | 22 | 8 | 10 | 1 | 1 | 1 |  |  |  |  | 110 |
| C | - | - | - | - | 11 | 1 |  |  |  |  |  |  |  |  |  | 12 |
| G | - | - | - | - | 7 |  | 1 |  |  |  |  |  |  |  |  | 8 |
| T | - | - | - | - | 65 | 26 | 11 | 16 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 129 |
| AC | - | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| AG | - | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| AT | - | 10 | 3 |  |  |  |  |  |  |  |  |  |  |  |  | 13 |
| CT | - | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| GA | - | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| TA | - | 8 | 3 |  |  |  |  |  |  |  |  |  |  |  |  | 11 |
| TC | - | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| AAC | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| AAG | 4 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| AAT | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| ACT |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| AGA | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| ATA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| ATC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| ATG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| ATT | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |
| CAA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CAG | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| CCT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTT | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| GAA | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| GAG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GAT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GCT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GGA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GTG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GTT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TAA | 3 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| TAG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TAT | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| TCA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TCG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TCT | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| TGA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TGC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TGG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTA | 5 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 6 |
| TTC | 6 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 7 |
| TTG | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| AAAC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTAT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TATT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTTG | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| ATTAT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTTTTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Table S5b** Microsatellites loci in *Withania adpressa*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Repeats** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **total** |
| A | - | - | - | - | 69 | 21 | 11 | 7 | 1 | 1 | 1 |  |  |  |  | 111 |
| C | - | - | - | - | 11 | 1 |  |  |  |  |  |  |  |  |  | 12 |
| G | - | - | - | - | 7 |  | 1 |  |  |  |  |  |  |  |  | 8 |
| T | - | - | - | - | 68 | 23 | 11 | 17 | 4 | 1 | 3 | 1 |  | 1 | 1 | 130 |
| AC | - | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| AG | - | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |
| AT | - | 10 | 3 |  |  |  |  |  |  |  |  |  |  |  |  | 13 |
| CT | - | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| GA | - | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| TA | - | 8 | 3 |  |  |  |  |  |  |  |  |  |  |  |  | 11 |
| TC | - | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| AAC | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| AAG | 4 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| AAT | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| ACT |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| AGA | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| ATA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| ATC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| ATG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| ATT | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |
| CAA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CAG | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| CCT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTT | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| GAA | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| GAG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GAT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GCT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GGA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GTG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GTT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TAA | 3 | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| TAG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TAT | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| TCA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TCG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TCT | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| TGA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TGC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TGG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTA | 5 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 6 |
| TTC | 6 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 7 |
| TTG | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| AAAC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTAT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TATT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTTG | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| ATTAT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTTTTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |

**Table S5c** Microsatellites loci in *Withania riebeckii*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Repeats** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **total** |
| A | - | - | - | - | 68 | 22 | 9 | 9 | 1 | 1 | 1 |  |  |  |  | 111 |
| C | - | - | - | - | 11 | 1 |  |  |  |  |  |  |  |  |  | 12 |
| G | - | - | - | - | 6 |  | 1 |  |  |  |  |  |  |  |  | 7 |
| T | - | - | - | - | 67 | 21 | 13 | 17 | 6 | 2 | 1 | 1 |  | 1 | 1 | 130 |
| AC | - | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| AG | - | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |
| AT | - | 10 | 3 |  |  |  |  |  |  |  |  |  |  |  |  | 13 |
| CT | - | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| GA | - | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| TA | - | 8 | 3 |  |  |  |  |  |  |  |  |  |  |  |  | 11 |
| TC | - | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| AAC | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| AAG | 4 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| AAT | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| ACT |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| AGA | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| ATA | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| ATC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| ATG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| ATT | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| CAA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CAG | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| CCT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTT | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| GAA | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| GAG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GAT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GCT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GGA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GTG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| GTT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TAA | 3 |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| TAG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TAT | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| TCA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TCG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TCT | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
| TGA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TGC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TGG | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTA | 5 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 6 |
| TTC | 6 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  | 7 |
| TTG | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 |
| AAAC | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTAT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| CTTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TATT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTTG | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |
| ATTAT | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
| TTTTTA | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |