

Table S4. Expression levels of *CsDGAT* genes in hemp different varieties based on transcriptome expression data

| Gene name | Varieties | | | | | | | | |
|------------------|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
| | Blackberry Kush | Black Lime | Cherry Chem | Canna Tsu | Mama Thai | Sour Diesel | Terple | Valley Fire | White Cookies |
| DGAT1 | 23.69757881 | 26.93819867 | 11.21502566 | 28.26532282 | 21.92621501 | 51.75651997 | 21.33940707 | 43.9993756 | 27.05278734 |
| DGAT2 | 4.511627871 | 6.624751987 | 6.451530232 | 6.604363599 | 5.571167481 | 9.212268791 | 7.32359415 | 9.459155926 | 9.057085507 |
| DGAT3 | 28.27914902 | 30.64001309 | 24.25456632 | 36.54814976 | 50.32785399 | 30.15424747 | 24.17681369 | 21.80001972 | 18.20999722 |
| CsWSD1.1 | 8.326863439 | 2.731753408 | 2.262103122 | 1.247117667 | 2.95032925 | 1.87285439 | 2.802380928 | 4.503905092 | 2.367005506 |
| CsWSD1.2 | 6.383866708 | 16.60134237 | 54.30921524 | 12.33719441 | 19.01090341 | 39.06888234 | 15.77478254 | 21.22419218 | 4.156155457 |
| CsWSD1.3 | 0.501095007 | 0.787279626 | 0.15357504 | 0.13579095 | 0.260712111 | 0.120387026 | 0.669912887 | 2.914963388 | 0.246703323 |
| CsWSD1.4 | 1.324611775 | 0 | 0.157428896 | 0 | 0.302605475 | 0.074676809 | 0 | 0.201773964 | 0 |
| CsWSD1.5 | 0.423116988 | 0.08915882 | 1.314156333 | 0.07708693 | 0.481005642 | 0.331927075 | 0.074059543 | 0.240687226 | 0.068265581 |
| CsWSD1.6 | 0.092751487 | 0.087268453 | 0.014125824 | 0.132150267 | 1.748604848 | 0.036521048 | 0.458927793 | 0.39294317 | 0.013562445 |
| CsWSD1.7 | 16.95695012 | 12.87896039 | 1.468791915 | 1.86371715 | 13.76718651 | 2.441460267 | 9.183908064 | 9.45417112 | 2.078445306 |