

**1. Query= NR_111478.1 *Psilocybe cyanescens* PRM 901481 ITS region;
from TYPE material**

A) Subject = *Psilocybe cyanescens* genome (this study)

> tig00010734 len=15258 reads=148 covStat=19.96 gappedBases=no
class=contig suggestRepeat=no suggestCircular=no
Length=15258

Score = 1208 bits (654), Expect = 0.0
Identities = 654/654 (100%), Gaps = 0/654 (0%)
Strand=Plus/Minus

```
Query 1 GATCATTATTGAATAAAGTTGGCGTGGTTGTAGCTGGTCTCTCGGGGGCATGTGCTCGC 60
      |||
Sbjct 8537 GATCATTATTGAATAAAGTTGGCGTGGTTGTAGCTGGTCTCTCGGGGGCATGTGCTCGC 8478

Query 61 CCGTCATCTTTATATCTCCACCTGTGCACCTTTTGTAGACGTTGAAACTGGATAGGAGAG 120
      |||
Sbjct 8477 CCGTCATCTTTATATCTCCACCTGTGCACCTTTTGTAGACGTTGAAACTGGATAGGAGAG 8418

Query 121 GGACTTGTCTTCAAGTTGAAGGATTTTCGGCGCTCTACGTTTTCATATACCCCAAAGA 180
      |||
Sbjct 8417 GGACTTGTCTTCAAGTTGAAGGATTTTCGGCGCTCTACGTTTTCATATACCCCAAAGA 8358

Query 181 ATGTAACAGAATGTATCTTATGGCTTTATGCCTATAAACTATATACAACTTTCAGCAACG 240
      |||
Sbjct 8357 ATGTAACAGAATGTATCTTATGGCTTTATGCCTATAAACTATATACAACTTTCAGCAACG 8298

Query 241 GATCTCTTGGCTCTCGCATCGATGAAGAACGCAGCGAAATGCGATAAGTAATGTGAATTG 300
      |||
Sbjct 8297 GATCTCTTGGCTCTCGCATCGATGAAGAACGCAGCGAAATGCGATAAGTAATGTGAATTG 8238

Query 301 CAGAATTCAGTGAATCATCGAATCTTTGAACGCACCTTGCCTCCTTGGTATTCCGAGGA 360
      |||
Sbjct 8237 CAGAATTCAGTGAATCATCGAATCTTTGAACGCACCTTGCCTCCTTGGTATTCCGAGGA 8178

Query 361 GCATGCCTGTTTGTAGTGTCAATTAATCTCAACCTTACCAGCTTTTGTAGCTTGTGTAA 420
      |||
Sbjct 8177 GCATGCCTGTTTGTAGTGTCAATTAATCTCAACCTTACCAGCTTTTGTAGCTTGTGTAA 8118

Query 421 TGGCTTGGACTTGGGGGTCTTTTCCCGCTTCTCTCGAGATGTCAGCTCCCTTAAATGT 480
      |||
Sbjct 8117 TGGCTTGGACTTGGGGGTCTTTTCCCGCTTCTCTCGAGATGTCAGCTCCCTTAAATGT 8058

Query 481 ATTAGCCGGCTGCCCGCTGTGGACCGTCTATTGGTGTGATAATTATCTACGCCGTGGACG 540
      |||
Sbjct 8057 ATTAGCCGGCTGCCCGCTGTGGACCGTCTATTGGTGTGATAATTATCTACGCCGTGGACG 7998

Query 541 TCTGCTCTCAATGGGTTGAAGCTGCTTCTAACCCTCCGTTTATTCGGACAGCACATAATG 600
      |||
Sbjct 7997 TCTGCTCTCAATGGGTTGAAGCTGCTTCTAACCCTCCGTTTATTCGGACAGCACATAATG 7938

Query 601 ACAATTTGACCTCAAATCAGGTAGGACTACCCGCTGAACTTAAGCATATCAATA 654
      |||
Sbjct 7937 ACAATTTGACCTCAAATCAGGTAGGACTACCCGCTGAACTTAAGCATATCAATA 7884
```

B) Subject = *Psilocybe cubensis* genome (Fricke et al.)

> NODE_23_length_557_cov_8574.734375
Length=681

Score = 656 bits (355), Expect = 0.0
Identities = 465/514 (90%), Gaps = 23/514 (4%)
Strand=Plus/Minus

```
Query 1 GATCATTATTGAATAAAGTTGGCGTGGTTGTAGCTGGTCTCTCGGGGGCATGTGCTCGC 60
      |||
Sbjct 511 GATCATTATTGAATAAAGTTGGCGTGGTTGTAGCTGGCCCTCTCGGGGGCATGTGCTCGC 452

Query 61 CCGTCATCTTTATATCTCCACCTGTGCACCTTTTGTAGA-C---G---TT-GAAACTGGA 112
      |||
Sbjct 451 CCGTCATCTTTATATCTCCACCTGTGCACCTTTTGTAGATCATTGTTTTTGGAAAGCTGGA 392

Query 113 TAGGAG--AGGGACTTGTC-CT--TCAAGTTGAAGGATTTTTC---GGCGCTCTACGTTT 164
      |||
Sbjct 391 TTGAAGTCAGAGATTACTCTCTGATGAA-TTGAAGGCTTTCTCAATGATGGTCTACGTTT 333
```

```

Query 165 TCATATACCCCAAAGAATGTAACAGAATGTATCT-TATGGCTTTATGCCTATAAAA-CTAT 222
|||||
Sbjct 332 TCATATACTCCAATGAATGTAACAGAATGTATCTATATGGCCTTGTGCCTATAAAACAAT 273

Query 223 ATACAACCTTTCAGCAACGGATCTCTTGGCTCTCGCATCGATGAAGAACGCAGCGAAATGC 282
|||||
Sbjct 272 ATACAACCTTTCAGCAACGGATCTCTTGGCTCTCGCATCGATGAAGAACGCAGCGAAATGC 213

Query 283 GATAAGTAATGTGAATTGCAGAATTCAGTGAATCATCGAATCTTTGAACGCACCTTGCGC 342
|||||
Sbjct 212 GATAAGTAATGTGAATTGCAGAATTCAGTGAATCATCGAATCTTTGAACGCACCTTGCGC 153

Query 343 TCCTTGGTATTCGAGGAGCATGCCTGTTTGTAGTGTCAATTAATCTCAACCTTACCAGC 402
|||||
Sbjct 152 TCCTTGGTATTCGAGGAGCATGCCTGTTTGTAGTGTCAATTAATCTCAACCTTACCAGC 93

Query 403 TTTTGTAGCTTGTGTAATGGCTTGGACTTGGGGGTCT-TTT-GCCGGCTTCTCTCGAGA 460
|||||
Sbjct 92 TTTTGTAGCTTGTGTAATGGCTTGGACTTGGGGGTCTTTATTTGCCGGCTTCTTACCA-A 34

Query 461 TGTCAGCTCCCCTTAAATGTATTAGCCGGCTGCC 494
|||||
Sbjct 33 -GTCAGCTCCCCTTAAATGCATTAGCCGGCTGCC 1

```

C) Subject = *Psilocybe "cyanescens" (actually serbica) genome (Fricke et al.)*

> unitig_97|quiver
Length=56899

Score = 867 bits (469), Expect = 0.0
Identities = 604/666 (91%), Gaps = 21/666 (3%)
Strand=Plus/Minus

```

Query 1 GATCATTATTGAATAACTTTGGCGTGGTTGTAGCTGGTCTCTCGGGGGCATGTGCTCGC 60
|||||
Sbjct 7840 GATCATTATTGAATAACTTTGGCGTGGTTGTAGCTGGCCCTCTCGGGGGCATGTGCCAC 7781

Query 61 C-CGTCATCTTTATATCTCCACCTGTGCACCTTTTGTAGA-CG--TTGAAACTGGATAGG 116
| |||||
Sbjct 7780 CATGTCATCTTTATATCTCCACCTGTGCACCTTTTGTAGAACGTTTTTGGACT-GATAGG 7722

Query 117 AGAGGGACT----TGTCTT-CAAGTTGAAGGATTTTTCGGCGCTCTACGTTTTTCATATA 171
|| |||
Sbjct 7721 AG-GGG-CTCGAAAGAGTTTCCAAGTTGAACG--TCCTGAACGGTCTACGTTTTTCATATA 7666

Query 172 CCCCAAAGAATGTAACAGAATGTATCTTATGGCTTTATGCCTATAAACTATATACAACCT 231
|||||
Sbjct 7665 CCCCAAAGAATGTAATAGAATGTATCATATGGCCAGTGCCTATAAACTAAATACAACCT 7606

Query 232 TCAGCAACGGATCTCTTGGCTCTCGCATCGATGAAGAACGCAGCGAAATGCGATAAGTAA 291
|||||
Sbjct 7605 TCAGCAACGGATCTCTTGGCTCTCGCATCGATGAAGAACGCAGCGAAATGCGATAAGTAA 7546

Query 292 TGTGAATTGCAGAATTCAGTGAATCATCGAATCTTTGAACGCACCTTGCCTCCTTGGTA 351
|||||
Sbjct 7545 TGTGAATTGCAGAATTCAGTGAATCATCGAATCTTTGAACGCACCTTGCCTCCTTGGTA 7486

Query 352 TTCCGAGGAGCATGCCTGTTTGTAGTGTCAATTAATCTCAACCTTACCAGCTTTTGTAG 411
|||||
Sbjct 7485 TTCCGAGGAGCATGCCTGTTTGTAGTGTCAATTAATCTCAACCTTACCAGCTTTTGTAG 7426

Query 412 CTTGTGTAATGGCTTGGACTTGGGGTCTTTTGCCGGCTTCTCTCGAGATGTCAGCTCCC 471
|| |||||
Sbjct 7425 CTCGTGTAATGGCTTGGACTTGGGGTCTTTTGCTGGCTTCG-TCAAGAGGTCAGCTCCC 7367

Query 472 CTTAAATGTATTAGCCGGCTGCC-GCTGTGGA-CCGTCTATTGGTGTGATAATTATCTA 529
|||||
Sbjct 7366 CTTAAATGCATTAGCCGGCTTCCCTGC-GTGGACCGTCTATTGGTGTGATAATTATCTA 7308

Query 530 CGCCGTGGACG-TCTGCTCTCAATGGGTGAAGCTGCTTCTAACCGTCCGTTTATTCGGA 588
|||||
Sbjct 7307 CGCCGTGGACAATCTGCTTT-AATGGGTGAAGCTGCTTCTAACCGTCCCTTAAGTTGGA 7249

Query 589 CAGCACATAATGACAATTTGACCTCAAATCAGGTAGGACTACCCGCTGAACTTAAGCATA 648
|| |||
Sbjct 7248 CAATACAT-ATGACAATTTGACCTCAAATCAGGTAGGACTACCCGCTGAACTTAAGCATA 7190

Query 649 TCAATA 654
|||||
Sbjct 7189 TCAATA 7184

```

2. Query= GU565177.1 *Psilocybe serbica* voucher PRM 903176 18S small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and 28S large subunit ribosomal RNA gene, partial sequence

A) Subject = *Psilocybe cyanescens* genome (this study)

> tig00010734 len=15258 reads=148 covStat=19.96 gappedBases=no
class=contig suggestRepeat=no suggestCircular=no
Length=15258

Score = 1046 bits (566), Expect = 0.0
Identities = 699/761 (92%), Gaps = 17/761 (2%)
Strand=Plus/Minus

Query	1	GATCATTATTGAATAACTTTGGCGTGGTTGTAGCTGGCCCTCTCGGGGGCATGTGCCAC	60
Sbjct	8537	GATCATTATTGAATAACTTTGGCGTGGTTGTAGCTGGTCTCTCGGGGGCATGTGCTCGC	8478
Query	61	CATGTCATCTTTATATCTCCACCTGTGCACCCTTTGTAGAACGTTTTGGACT-GATAGG	119
Sbjct	8477	C-CGTCATCTTTATATCTCCACCTGTGCACCCTTTGTAGA-CG--TTGAAACTGGATAGG	8422
Query	120	AGGGGCTCGAAAGAGTTTCCAAGTTGAACG--TCCTGAACGGTCTACGTTTTCATATAAC	177
Sbjct	8421	AGAGGGAC--TTGTCCTT-CAAGTTGAAGGATTTTCGGCGCTCTACGTTTTCATATAAC	8365
Query	178	CCAAAGAATGTAATAGAAATGATCATATGGCCAGTGCCTATAAACTAAATACAACCTTC	237
Sbjct	8364	CCAAAGAATGTAACAGAATGATCTTATGGCTTTATGCCTATAAACTATATAACAACCTTC	8305
Query	238	AGCAACGGATCTCTTGGCTCTCGCATCGATGAAGAACGCAGCGAAATGCGATAAGTAATG	297
Sbjct	8304	AGCAACGGATCTCTTGGCTCTCGCATCGATGAAGAACGCAGCGAAATGCGATAAGTAATG	8245
Query	298	TGAATGCGAATTCAGTGAATCATCGAATCTTTGAACGCACCTTGCCTCCTTGGTATT	357
Sbjct	8244	TGAATGCGAATTCAGTGAATCATCGAATCTTTGAACGCACCTTGCCTCCTTGGTATT	8185
Query	358	CCGAGGAGCATGCCTGTTTGGAGTGCATTAATTTCTCAACCTTACCAGCTTTTGTAGCT	417
Sbjct	8184	CCGAGGAGCATGCCTGTTTGGAGTGCATTAATTTCTCAACCTTACCAGCTTTTGTAGCT	8125
Query	418	CGTGTAAATGGCTTGGACTTGGGGTCTTTTGGCTGGCTTC-GTCAAGAGGTCAGCTCCCCT	476
Sbjct	8124	TGTGTAAATGGCTTGGACTTGGGGTCTTTTGGCGCTTCTCTCGAGATGTCAGCTCCCCT	8065
Query	477	TAAATGCATTAGCCGGCTTCCCTGC-GTGGACCCGTCTATTGGTGTGATAAATTATCTACG	535
Sbjct	8064	TAAATGTATTAGCCGGCTGCC-CGTGTGGA-CCGTCTATTGGTGTGATAAATTATCTACG	8007
Query	536	CCGTGGACAATCTGCT-TTAATGGGTTGAAGCTGCTTCTAACCGTCCGTTAAGTTGGACA	594
Sbjct	8006	CCGTGGAC-GTCTGCTCTCAATGGGTTGAAGCTGCTTCTAACCGTCCGTTTATTCCGGACA	7948
Query	595	ATACAT-ATGACAATTTGACCTCAAATCAGGTAGGACTACCCGCTGAACTTAAGCATATC	653
Sbjct	7947	GCACATAATGACAATTTGACCTCAAATCAGGTAGGACTACCCGCTGAACTTAAGCATATC	7888
Query	654	AATAAGCGGAGGAAAAGAACTAACAAGGATTCCTTAGTAAGTGCAGTGAAGCGGGAA	713
Sbjct	7887	AATAAGCGGAGGAAAAGAACTAACAAGGATTCCTTAGTAAGTGCAGTGAAGCGGGAA	7828
Query	714	AAGCTCAAATTTAAAATCTGGCGGTCTTTGACTGTCCGAGT	754
Sbjct	7827	AAGCTCAAATTTAAAATCTGGCGGTCTTTGACTGTCCGAGT	7787

B) Subject = *Psilocybe cubensis* genome (Fricke et al.)

> NODE_23_length_557_cov_8574.734375
Length=681

Score = 599 bits (324), Expect = 1e-170
Identities = 458/517 (89%), Gaps = 32/517 (6%)
Strand=Plus/Minus

```
Query 1 GATCATTATTGAATAA... 60
Sbjct 511 GATCATTATTGAATAA... 452
Query 61 CATGTCATCTTTATAT... 114
Sbjct 451 C-CGTCATCTTTATAT... 393
Query 115 ATAGGAGGGGCTCGAA... 162
Sbjct 392 AT-TGA--AG-TC-AG... 339
Query 163 ACGTTTTTCATATA... 221
Sbjct 338 ACGTTTTTCATACT... 279
Query 222 A-CTAAATACAAC... 280
Sbjct 278 AACAAATACAAC... 219
Query 281 AAATGCGATAAGT... 340
Sbjct 218 AAATGCGATAAGT... 159
Query 341 TTGCGCTCCTTGG... 400
Sbjct 158 TTGCGCTCCTTGG... 99
Query 401 ACCAGCTTTTGT... 458
Sbjct 98 ACCAGCTTTTGT... 39
Query 459 -CAAGAGGTCAG... 494
Sbjct 38 ACCA-A-GTCAG... 4
```

C) Subject = *Psilocybe "cyanescens"* (actually *serbica*) genome (Fricke et al.)

> unitig_97|quiver
Length=56899

Score = 1387 bits (751), Expect = 0.0
Identities = 753/754 (99%), Gaps = 0/754 (0%)
Strand=Plus/Minus

```
Query 1 GATCATTATTGAATAA... 60
Sbjct 7840 GATCATTATTGAATAA... 7781
Query 61 CATGTCATCTTTATAT... 120
Sbjct 7780 CATGTCATCTTTATAT... 7721
Query 121 GGGGCTCGAAAGAG... 180
Sbjct 7720 GGGGCTCGAAAGAG... 7661
Query 181 AAGAATGTAATAGA... 240
Sbjct 7660 AAGAATGTAATAGA... 7601
Query 241 AACGGATCTCTTGG... 300
Sbjct 7600 AACGGATCTCTTGG... 7541
Query 301 ATTGCAGAATTCAG... 360
Sbjct 7540 ATTGCAGAATTCAG... 7481
Query 361 AGGAGCATGCCTGT... 420
Sbjct 7480 AGGAGCATGCCTGT... 7421
```

```

Query 421  GTAATGGCTTGGACTTGGGGTCTTTTGGCTGGCTTCGTCAAGAGGTCAGCTCCCCTTAAA 480
          |
Sbjct 7420  GTAATGGCTTGGACTTGGGGTCTTTTGGCTGGCTTCGTCAAGAGGTCAGCTCCCCTTAAA 7361

Query 481  TGCATTAGCCGGCTTCCCTGCGTGGACCCGTCTATTGGTGTGATAATTATCTACGCCGTG 540
          |
Sbjct 7360  TGCATTAGCCGGCTTCCCTGCGTGGACCCGTCTATTGGTGTGATAATTATCTACGCCGTG 7301

Query 541  GACAATCTGCTTTAATGGGTTGAAGCTGCTTCTAACCCGTCCGTTAAGTTGGACAATACAT 600
          |
Sbjct 7300  GACAATCTGCTTTAATGGGTTGAAGCTGCTTCTAACCCGTCCGTTAAGTTGGACAATACAT 7241

Query 601  ATGACAATTTGACCTCAAATCAGGTAGGACTACCCGCTGAACTTAAGCATATCAATAAGC 660
          |
Sbjct 7240  ATGACAATTTGACCTCAAATCAGGTAGGACTACCCGCTGAACTTAAGCATATCAATAAGC 7181

Query 661  GGAGGAAAAGAACTAACAAGGATTCCCCTAGTAACTGCGAGTGAAGCGGGAAAAGCTCA 720
          |
Sbjct 7180  GGAGGAAAAGAACTAACAAGGATTCCCCTAGTAACTGCGAGTGAAGCGGGAAAAGCTCA 7121

Query 721  AATTTAAAATCTGGCGGTCTTTGACTGTCCGAGT 754
          |
Sbjct 7120  AATTTAAAATCTGGCGGTCTTTGACTGTCCGAGT 7087

```

3. Query= KC669284.1 *Psilocybe cubensis* voucher RHP5203 (TENN) 18S ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and 28S ribosomal RNA gene, partial sequence

A) Subject = *Psilocybe cyanescens* genome (this study)

```

> tig00010734 len=15258 reads=148 covStat=19.96 gappedBases=no
class=contig suggestRepeat=no suggestCircular=no
Length=15258

```

```

Score = 985 bits (533), Expect = 0.0
Identities = 671/733 (92%), Gaps = 27/733 (4%)
Strand=Plus/Minus

```

```

Query 2  CTTGGTCAATTTAGAGGAAGTAAAAGTCGTAACAAGGTTTCCGTAGGTGAACCTGCGGAA 61
          |
Sbjct 8597  CTTGGTCAATTTAGAGGAAGTAAAAGTCGTAACAAGGTTTCCGTAGGTGAACCTGCGGAA 8539

Query 62  GGATCATTATTGAATAACTTTGGCGTGGTTGTAGCTGGCCCTCTCGGGGCGATGTGCTCG 121
          |
Sbjct 8538  GGATCATTATTGAATAACTTTGGCGTGGTTGTAGCTGGCCCTCTCGGGGCGATGTGCTCG 8479

Query 122  CCCGTCATCTTTATATTTCCACCTGTGCACCTTTTGTAGATCATTGTTTTGGAAGCTGG 181
          |
Sbjct 8478  CCCGTCATCTTTATATTTCCACCTGTGCACCTTTTGTAGATCATTGTTTTGGAAGCTGG 8427

Query 182  ATTGAAGTCAGAGATTACTCTCTGATGAA-TTGAAGGCTTCTCAATGATGGTCTACGTT 240
          |
Sbjct 8426  ATAGGAG--AGGGACTTGTC-CT--TCAAGTTGAAGGATTTTTTC---GGCGCTCTACGTT 8375

Query 241  TTCATATACTCCAATGAATGTAACAGAATGTATCTATATGGCCTTGTGCCTATAAAACAA 300
          |
Sbjct 8374  TTCATATACTCCAATGAATGTAACAGAATGTATCTATATGGCCTTGTGCCTATAAAACAA 8317

Query 301  TATACAACCTTTCAGCAACGGATCTCTTGGCTCTCGCATCGATGAAGAACGCAGCGAAATG 360
          |
Sbjct 8316  TATACAACCTTTCAGCAACGGATCTCTTGGCTCTCGCATCGATGAAGAACGCAGCGAAATG 8257

Query 361  CGATAAGTAATGTGAATTGCAGAATTCAGTGAATCATCGAATCTTTGAACGCACCTTGCG 420
          |
Sbjct 8256  CGATAAGTAATGTGAATTGCAGAATTCAGTGAATCATCGAATCTTTGAACGCACCTTGCG 8197

Query 421  CTCCTTGGTATTCGAGGAGCATGCCTGTTTGGAGTGTCAATTAATTTCTCAACCTTACCAG 480
          |
Sbjct 8196  CTCCTTGGTATTCGAGGAGCATGCCTGTTTGGAGTGTCAATTAATTTCTCAACCTTACCAG 8137

Query 481  CTTTTGTTAGCTTGTGTAATGGCTTGGACTTGGGGGTTTATTTTGGCGGCTTCTTACCA- 539
          |
Sbjct 8136  CTTTTGTTAGCTTGTGTAATGGCTTGGACTTGGGGGTTTATTTTGGCGGCTTCTTACCA- 8079

```

```

Query  540  A-GTCAGCTCCCCCTAAATGCATTAGCCGGCTGCCCGCTGTGGACCGTCTATTGGTGTGA 598
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct  8078  ATGTCAGCTCCCCCTAAATGTATTAGCCGGCTGCCCGCTGTGGACCGTCTATTGGTGTGA 8019

Query  599  TAATTATCTACGCCGTGGATGTCTACTATTAATGGGTTGAAGCTGCTTCAAACCGTCTGT 658
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct  8018  TAATTATCTACGCCGTGGACGTCTGCTCTCAATGGGTTGAAGCTGCTTCTAACCGTCCGT 7959

Query  659  TTACTCAGACA--AT-TAATGACAATTTGACCTCAAATCAGGTAGGACTACCCGCTGAAC 715
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct  7958  TTATTCGGACAGCACATAATGACAATTTGACCTCAAATCAGGTAGGACTACCCGCTGAAC 7899

Query  716  TTAAGCATATCAA 728
| | | | | | | | | | |
Sbjct  7898  TTAAGCATATCAA 7886

```

B) Subject = *Psilocybe cubensis* genome (Fricke et al.)

```

> NODE_23_length_557_cov_8574.734375
Length=681

```

```

Score = 1050 bits (568), Expect = 0.0
Identities = 571/572 (99%), Gaps = 1/572 (0%)
Strand=Plus/Minus

```

```

Query  2  CTTGGTCAATTTAGAGGAAGTAAAAGTCGTAACAAGGTTTCCGTAGGTGAACCTGCGGAA 61
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct  571  CTTGGTC-ATTTAGAGGAAGTAAAAGTCGTAACAAGGTTTCCGTAGGTGAACCTGCGGAA 513

Query  62  GGATCATTATTGAATAACTTTGGCGTGGTTGTAGCTGGCCCTCTCGGGGGCATGTGCTCG 121
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct  512  GGATCATTATTGAATAACTTTGGCGTGGTTGTAGCTGGCCCTCTCGGGGGCATGTGCTCG 453

Query  122  CCCGTCATCTTTATATTTCCACCTGTGCACTTTTTGTAGATCATTGTTTTTGGAAGCTGG 181
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct  452  CCCGTCATCTTTATATTTCCACCTGTGCACTTTTTGTAGATCATTGTTTTTGGAAGCTGG 393

Query  182  ATTGAAGTCAGAGATTACTCTCTGATGAATTGAAGGCTTTCTCAATGATGGTCTACGTTT 241
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct  392  ATTGAAGTCAGAGATTACTCTCTGATGAATTGAAGGCTTTCTCAATGATGGTCTACGTTT 333

Query  242  TCATATACTCCAATGAATGTAACAGAATGTATCTATATGGCCTTGTCCTATAAAACAAT 301
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct  332  TCATATACTCCAATGAATGTAACAGAATGTATCTATATGGCCTTGTCCTATAAAACAAT 273

Query  302  ATACAACCTTCAGCAACGGATCTCTGGCTCTCGCATCGATGAAGAACGCAGCGAAATGC 361
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct  272  ATACAACCTTCAGCAACGGATCTCTGGCTCTCGCATCGATGAAGAACGCAGCGAAATGC 213

Query  362  GATAAGTAATGTGAATTGCAGAATTCAGTGAATCATCGAATCTTTGAACGCACCTTGCGC 421
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct  212  GATAAGTAATGTGAATTGCAGAATTCAGTGAATCATCGAATCTTTGAACGCACCTTGCGC 153

Query  422  TCCTTGGTATTCCGAGGAGCATGCCTGTTTGAGTGCATTAATCTCAACCTTACCAGC 481
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct  152  TCCTTGGTATTCCGAGGAGCATGCCTGTTTGAGTGCATTAATCTCAACCTTACCAGC 93

Query  482  TTTTGTAGCTTGTGTAATGGCTTGGACTTGGGGGTTTATTTTGC CGGCTTCTTACCAAG 541
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct  92  TTTTGTAGCTTGTGTAATGGCTTGGACTTGGGGGTTTATTTTGC CGGCTTCTTACCAAG 33

Query  542  TCAGCTCCCCTTAAATGCATTAGCCGGCTGCC 573
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct  32  TCAGCTCCCCTTAAATGCATTAGCCGGCTGCC 1

```

C) Subject = *Psilocybe "cyanescens"* (actually *serbica*) genome (Fricke et al.)

```

> unitig_97|quiver
Length=56899

```

```

Score = 894 bits (484), Expect = 0.0
Identities = 661/740 (89%), Gaps = 38/740 (5%)
Strand=Plus/Minus

```

```

Query  2  CTTGGTCAATTTAGAGGAAGTAAAAGTCGTAACAAGGTTTCCGTAGGTGAACCTGCGGAA 61
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct  7900  CTTGGTC-ATTTAGAGGAAGTAAAAGTCGTAACAAGGTTTCCGTAGGTGAACCTGCGGAA 7842

```

Query	62	GGATCATTATTGAATAACTTTGGCGTGGTTGTAGCTGGCCCTCTCGGGGGCATGTGCTCG 	121
Sbjct	7841	GGATCATTATTGAATAACTTTGGCGTGGTTGTAGCTGGCCCTCTCGGGGGCATGTGCCCA 	7782
Query	122	CC-CGTCATCTTTATATTTCCACCTGTGCACCTTTTGTAGATCATTGTTTTTGGGAAGCTG 	180
Sbjct	7781	CCATGTCATCTTTATATCTCCACCTGTGCACCCTTTGTAGA--A-CGTTTTTGG-A-CT- 	7728
Query	181	GAT-TGA--AG-TCAGAGATTACTCTCTGATGAATTGAAGGCTTCTCAATG-ATGGTCT 	235
Sbjct	7727	GATAGGAGGGGCTC-GA-AAGAGTTTC-CA--AGTTGAA--C-GTC-C--TGAACGGTCT 	7679
Query	236	ACGTTTTTCATATACTCCAATGAATGTAACAGAATGTATCTATATGGCCTTGTGCCTATAA 	295
Sbjct	7678	ACGTTTTTCATATAACCCCAAAGAATGTAATAGAATGTATC-ATATGGCCCAGTGCCTATAA 	7620
Query	296	AACAATATACAACCTTTCAGCAACGGATCTCTTGGCTCTCGCATCGATGAAGAACGCAGCG 	355
Sbjct	7619	A-CTAAATACAACCTTTCAGCAACGGATCTCTTGGCTCTCGCATCGATGAAGAACGCAGCG 	7561
Query	356	AAATGCGATAAGTAATGTGAATTGCAGAATTCAGTGAATCATCGAATCTTTGAACGCACC 	415
Sbjct	7560	AAATGCGATAAGTAATGTGAATTGCAGAATTCAGTGAATCATCGAATCTTTGAACGCACC 	7501
Query	416	TTGCGCTCCTTGGTATTCCGAGGAGCATGCCTGTTTGAGTGTCAATTAATTTCTCAACCTT 	475
Sbjct	7500	TTGCGCTCCTTGGTATTCCGAGGAGCATGCCTGTTTGAGTGTCAATTAATTTCTCAACCTT 	7441
Query	476	ACCAGCTTTTGTAGCTTGTGTAATGGCTTGGACTTGGGGGTTTATTTTGCCTGCTTCTT 	535
Sbjct	7440	ACCAGCTTTTGTAGCTCGTGTAAATGGCTTGGACTTGGGGGCTCT-TTT-GCTGGCTTCGT 	7383
Query	536	ACCA-A-GTCAGCTCCCCCTAAATGCATTAGCCGGCTGCC-CTGTGGA-CCGTCTATT 	591
Sbjct	7382	-CAAGAGGTCAGCTCCCCCTAAATGCATTAGCCGGCTTCCCTGC-GTGGACCCGTCTATT 	7325
Query	592	GGTGTGATAATTATCTACGCCGTGGATG-TCTACTATTAATGGGTTGAAGCTGCTTCAA 	650
Sbjct	7324	GGTGTGATAATTATCTACGCCGTGGACAATCTGCT-TTAATGGGTTGAAGCTGCTTCTAA 	7266
Query	651	CCGCTGTTTACTCAGACAATT-A-ATGACAATTTGACCTCAAATCAGGTAGGACTACCC 	708
Sbjct	7265	CCGTCCTTTAAGTTGGACAATACATATGACAATTTGACCTCAAATCAGGTAGGACTACCC 	7206
Query	709	GCTGAACCTAAGCATATCAA 728 	
Sbjct	7205	GCTGAACCTAAGCATATCAA 7186 	