

## Number of mutations in Gene3375 of D. MeLanogaster as a measure of reLatedness

**Aim:** To measure reLatedness by counting tHe mutations in Gene3375 of D. MeLanogaster

**Experiment:**

1. Compare each species and count tHe number of mutations from Base
2. Write tHe most reLated species

**Data:**

Parent:

TTTGACTCGCGAAGCACAGGGGCCCGTACCTACCTAACCAGTAGCCGCCTAGTGTGTGGGATTGGGGCCTTGGT  
CTCCCTTAAACGAGCGTTAACGCACATTCCAAATGAGATGTGCCCTACTAAGTCATCGAATCTTAATTCTAAACGGC  
CGGGCAATTAGCCTCGTCTGCTGCTTTACTGTTCTGGCATGATCGAAGT

Sp1:

TCTGACTCCCGGAGCACAGGGGACCAGTCGCGACCCAAACAGTAGCCGCCAGCGTATGGGATTGGGGCCTAGA  
TCTTCCTTATAGGAACATAATCGCACATTCAAATGAGATGTTCTTTACGAAGTCAACGAATCTTAATTATATACTG  
ACTGGCTACCAGCCTCATCGACTGCATTATTGTTCTGGCATGACCGAAGA

Sp2:

TTTGACTCGCGAAGAACAGGGGCCCTGTACCTACCTAACCAGTAGCCGCCTAGTGTGTGGGATTGGGGCCTTGGT  
CTCCCTTAAACGAGCGTTAACGCACATTCCAAATGAGATGTGCCCTACTAAGTCATCGAATCTTAATTCTAAACGCC  
CGGCCCATTAGCCTCGTCTGCTGCTTTACTGTTCTGGCATGATAGAAGT

Sp3:

TTCGTCTCGCGAAGCACGGGGGCCAGTATCTCCCTAACCACGACCAGCGGTGTATGTGTGCTATGCCTAGATGTA  
TTCCCTAAAGGATAATTACACGCATTACAAAGGCTATCTAAACTGCTGAGTCAGAGTACAGGAACTCAGAGAAAC  
CAGATAGGTAGCCGCTTCTGCTGCTCTCCTGTTTCATGGTGACCCACC

Sp4:

TTTGACTCGGGAAGCACAGGGGCCCGTACCTAGCTAGCCAGTATCCGCCTAGTGTCTGGGATTCCGGCATTGGTC  
TCCCTTAAACGAGCGTTAACGCACATTGCAAATTAGATGTGACCTAATTAGTCATCGAATCTTAATTCTAAAGGGCC  
GGGCAATTAGACTCGTCGGTTGCTTTACTGTTCTGGCACGATCGAAGT

Sp5:

TTTGACTCGCGAAGCAGAGTCGCCCCGGACCTTCTACCTAGTAGTCGCCTAATGTATGGGACTGGGGCCTTGGTC  
GCCCCCTAATCGAGCGTTAACGCACATTCCAAATTAGATGCGGCCTACTAAGTCATTGAATCTGAAATCCAAACGGC  
CGGGCACTTACCCTCGTCAGCTGCTATATTGTTCTGGCATGATCGAAGT

Sp6:

TTTGACTAGCGAAGGACGGTGGGACGGCAACAACATAATCATTGCGGAGTTAATGTCTGGGGCTGCGGCGTGGTC  
GTTTATTAAAGGAGCGGTAACGAACATTCCAAATACGGTGTGAACTAGAATGTCAACGAACTCGGTGCATAACT  
ACCGGACAATTCGCCGTTCAACGGCGTAACTGTTTGTCAAGAACCTAGA

Sp7:

ATATACTCGCCAGGCACGGATGCCAAATGGCTCCCTAGGAGGCAGCCCCATATTGGGTGCGATTGGGGCCTTAA  
CTCCGTAAACGAGCGTTGAGGCAGGTTCTACATGACATGTGCCATACTAAGTAATCGAACCTTAATTCTATAAGC  
TACTGGACCTAGCCTCGTTGTCTTCGTCCTGCTGCGGGCCTGATCGGATA

Result:

The most related species is: \_\_\_\_\_