1. '/cygdrive/c/Program Files/NCBI/blast-BLAST\_VERSION+/bin/makeblastdb.exe' -in mystery\_transcripts.fasta -dbtype nucl -out unknown\_nucleotide
2. '/cygdrive/c/Program Files/NCBI/blast-BLAST\_VERSION+/bin/makeblastdb.exe' -in mystery\_proteins.fasta -dbtype prot -out unknown\_protein
3. '/cygdrive/c/Program Files/NCBI/blast-BLAST\_VERSION+/bin/blastn.exe' -query mystery\_nucleotide\_query.fasta -task megablast -db unknown\_nucleotide -out blast\_NCresults.txt -evalue 1e-3 -max\_hsps 5 -subject\_besthit -outfmt 7
4. Most Similar: T010027234997
5. grep -v '^#' blast\_NCresults.txt | awk '$3 >= 90' >> most\_similar.txt
6. '/cygdrive/c/Program Files/NCBI/blast-BLAST\_VERSION+/bin/blastp.exe' -query mystery\_protein\_query.fasta -db unknown\_protein -out blast\_PTresults.txt -evalue 1e-5 -max\_hsps 15 -subject\_besthit -outfmt 7
7. Best Hit: P010027090796

8.) What is the species of the mystery\_transcripts.fasta file?

Coffea arabica

9.) What is the species of the mystery query?

**jasminoides**

10.) What is the gene of the mystery query?

**Gardenia**