

## What is NCBI?

NCBI stands for National Center for Biotechnological Information.

House of Database act as bioinformatics tool

Allows researchers analyze desired data.

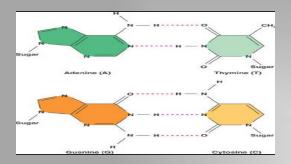
Coordinating efforts to gather biotechnology information

Supports a student, as it is easy to access

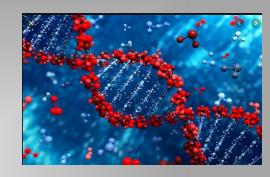
Allows researchers interpret the desired data



# What can we get from here?



Nitrogenous base pairs



Gene and Genomics

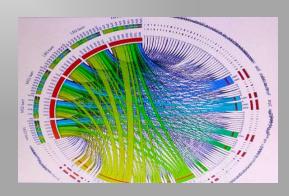


**Proteins** 





Databases and tools



### **Applications**

1

Research
and biological
work is done
in silico then
after in
physical
laboratory.

2

Initiates
analysis and
comparison
among
various crops
and animal
models.

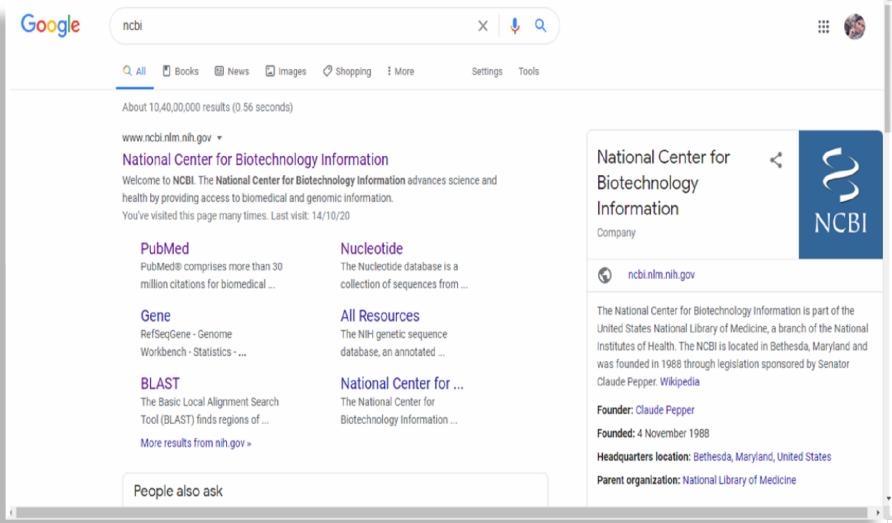
3

Genomic data are accessible like base pairs, size, proteins, genes liable for a particular disease. 4

Reduces the understandin g gap and make easier for enzyme targeting

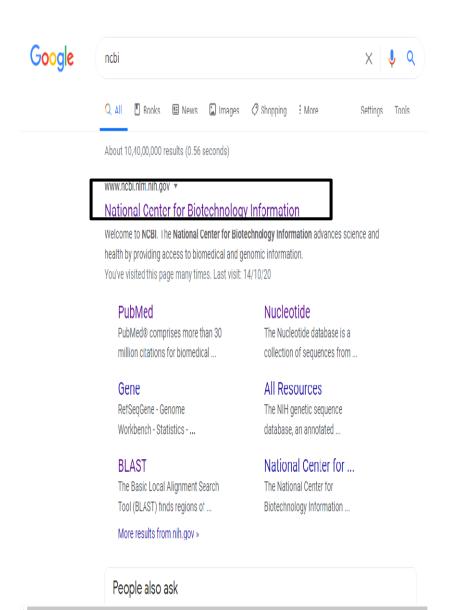


#### THE PROCEDURE IS SHOWN BELOW.



Search for NCBI in Google page.



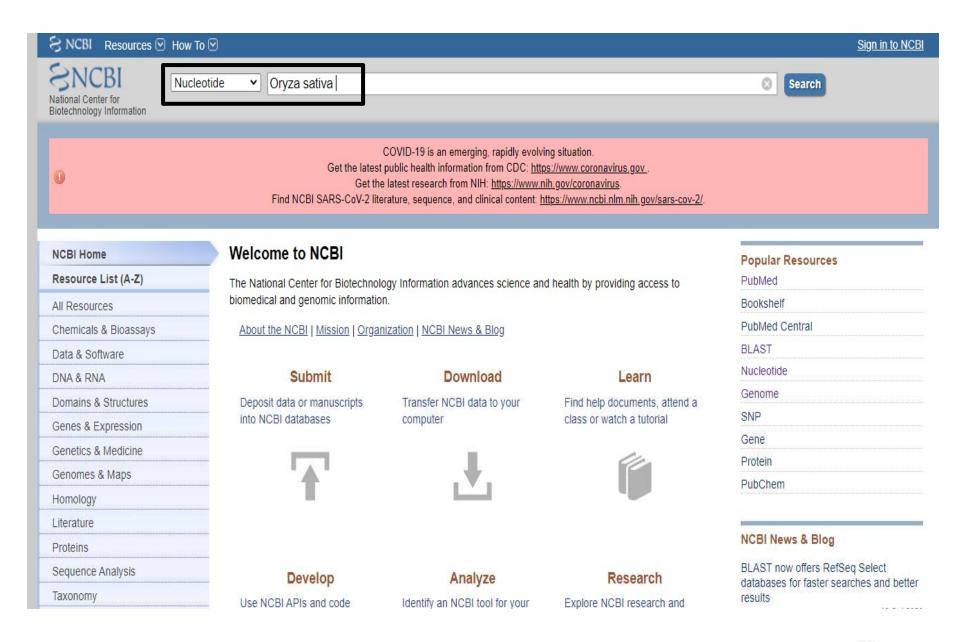


Enter into the website.



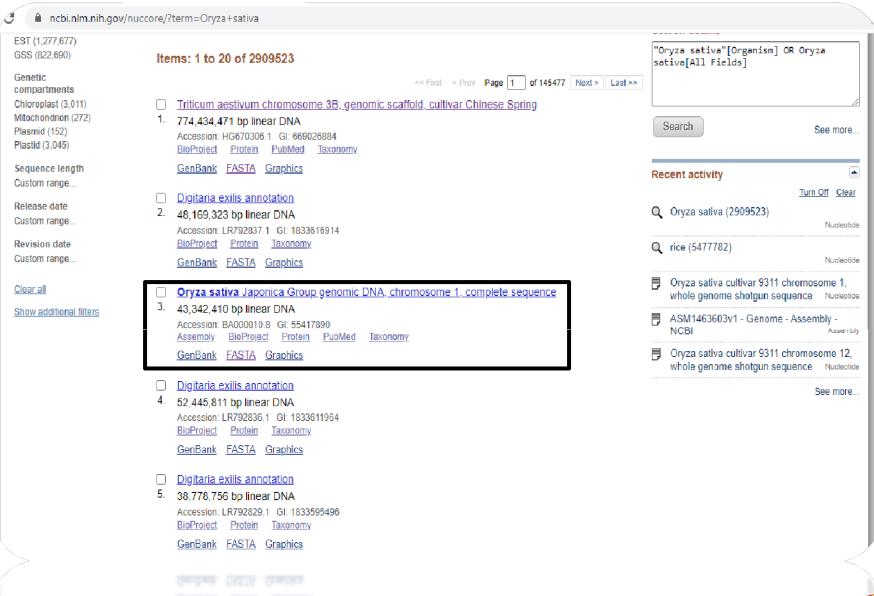
NCBI home page.





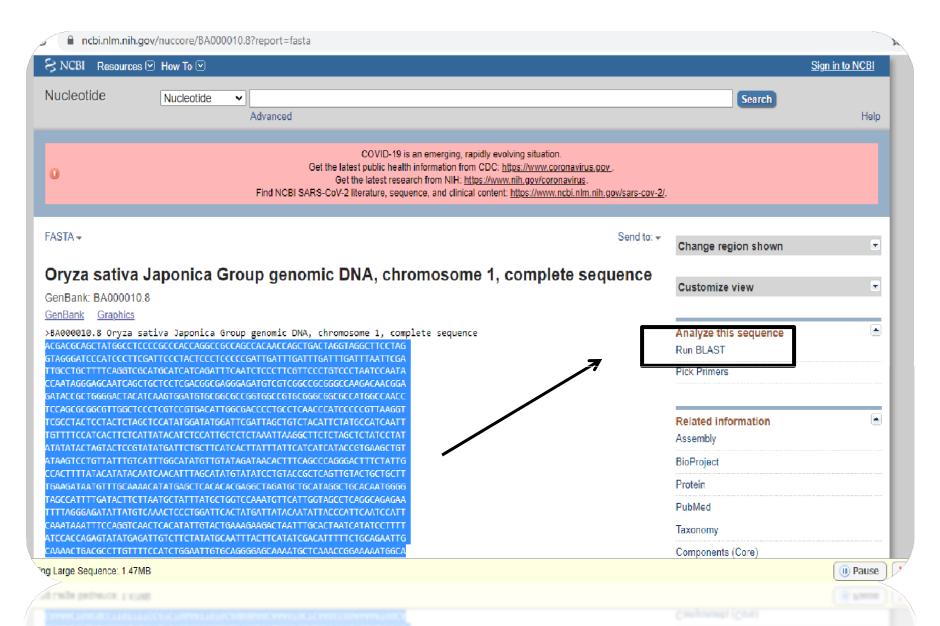
Enter nucleotide in the pop up box and search for a organism. Here I've taken Rice.





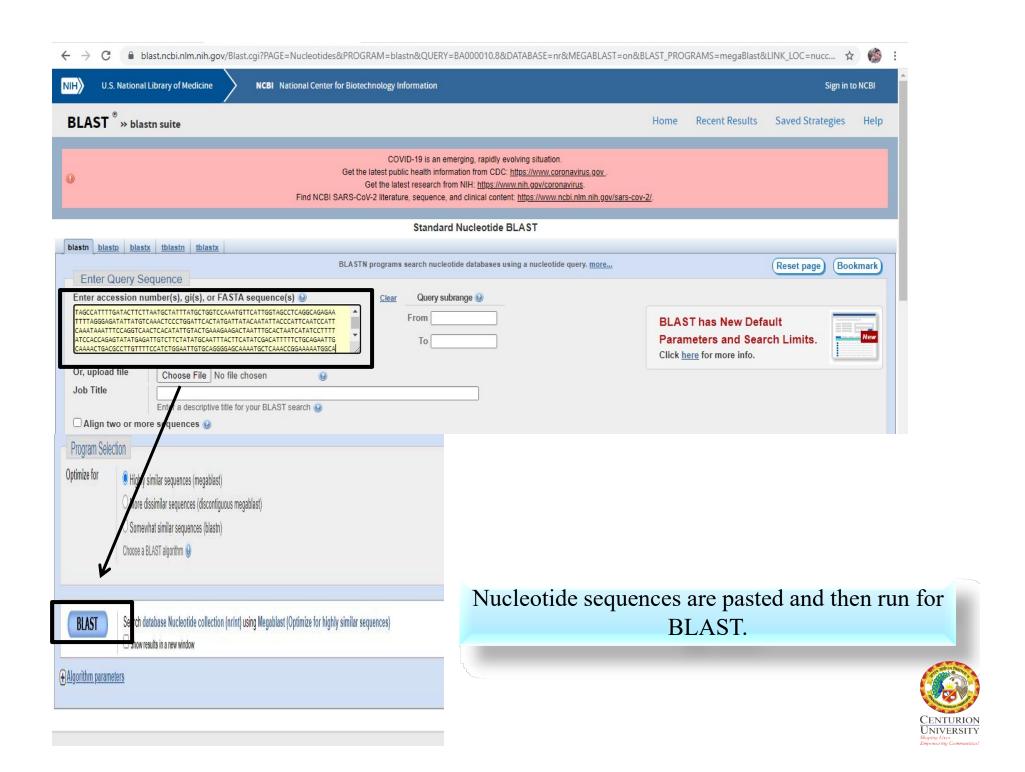
Enter on the FASTA sequence of Oryza sativa japonica group.

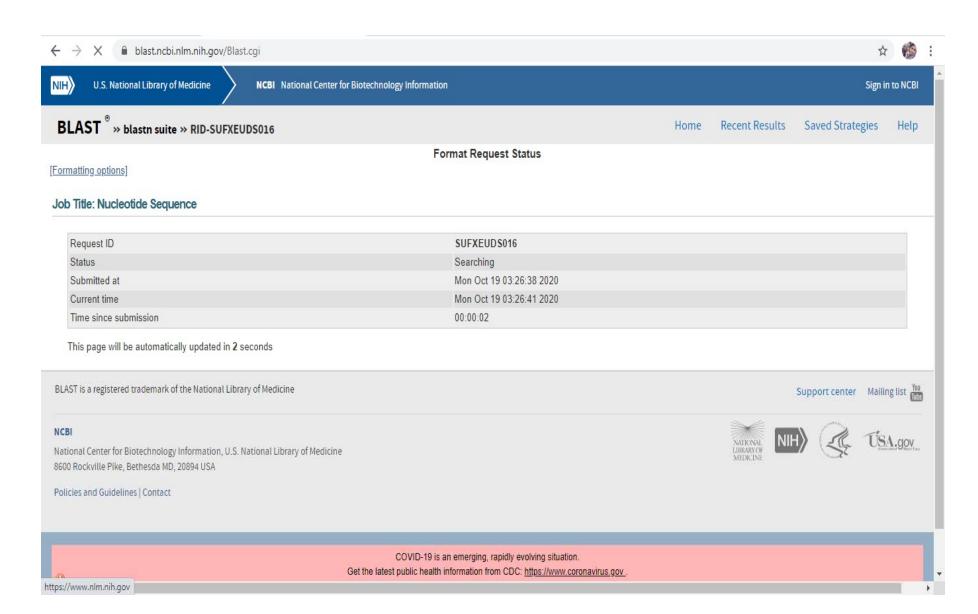




Sequences are copied and entered for BLAST.

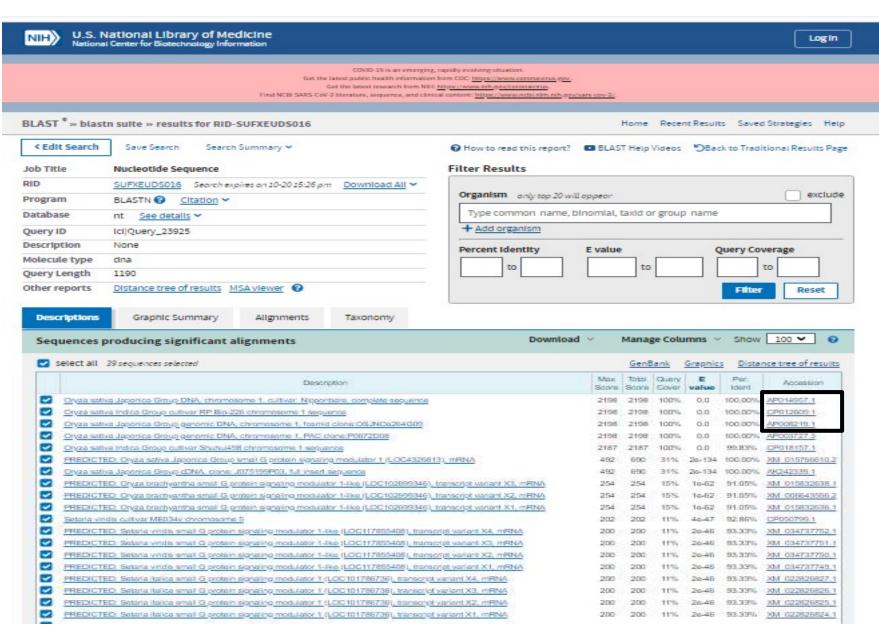






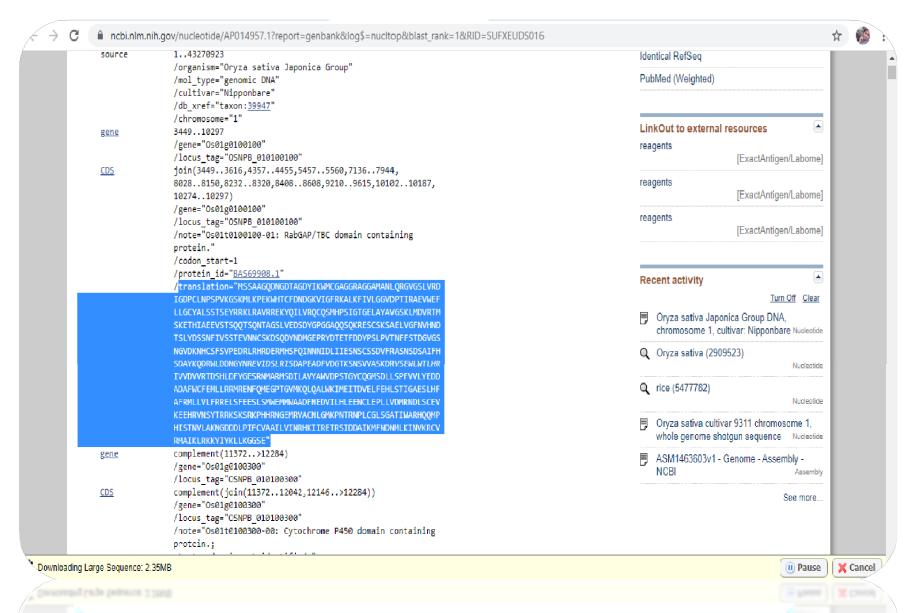
Running status.





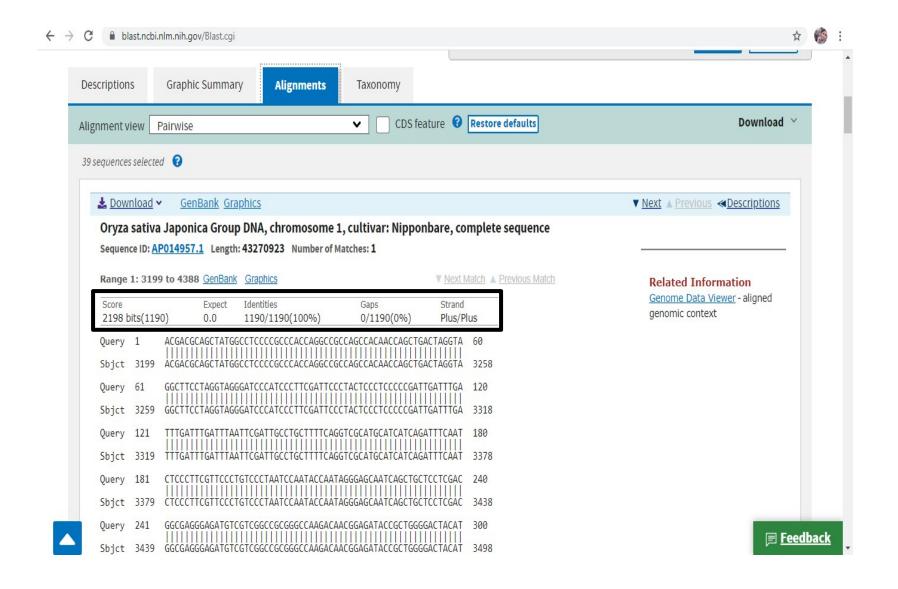
Result shows the similar sequences





#### Translated sequence are shown on entering the accession.





Alignment shows the score, identities and gaps for every respective similar species.

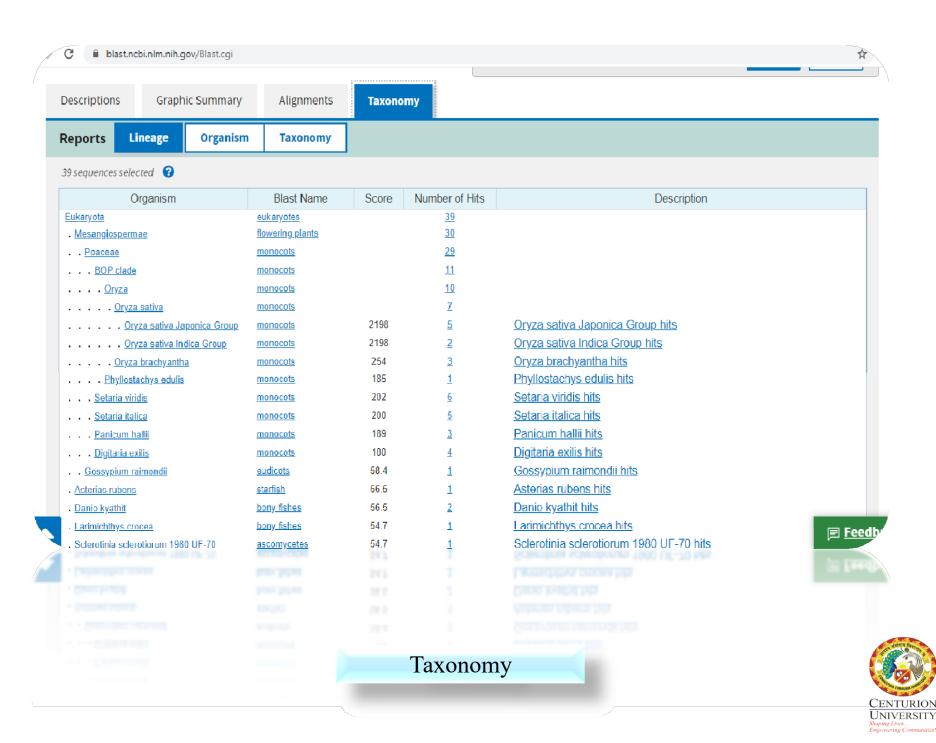


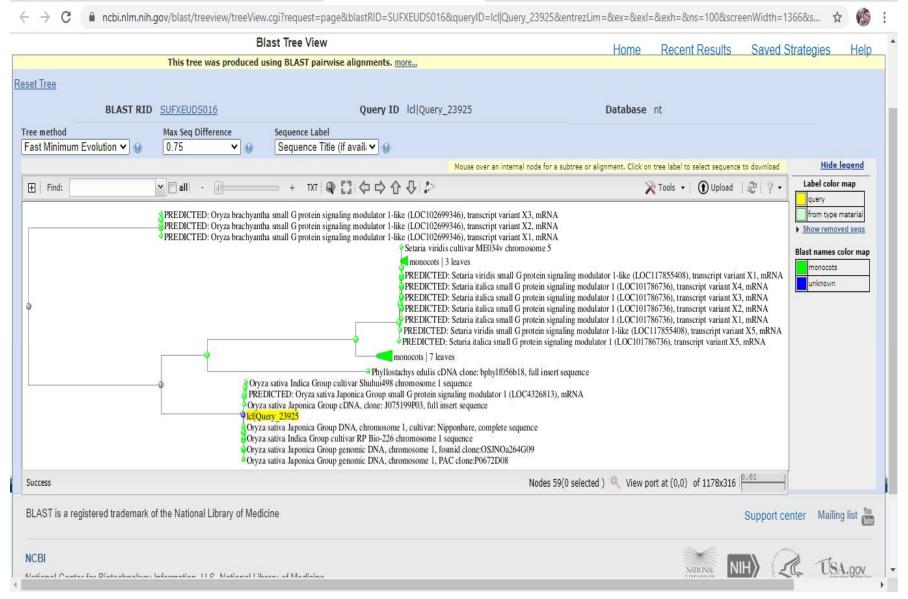




Graphic summary







Distance tree result.



# Thank you

