

# DNA Identification Sequences

**Specimen:** Red Reishi

**Description:** Nucleotide collection (nt)

**Program:** BLAST 2.8.1+

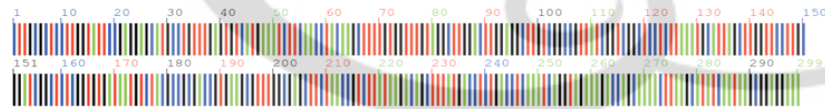
**Molecule Type:** Nucleic acid



DNA barcode test is a molecular biology technique that uses a recognized and relatively short DNA fragment in the genome to identify species. It is fast, accurate, and free from the morphological characteristics of the sample. It is suitable for medicinal materials and bases. The identification of the original species is an effective supplement to the traditional Chinese medicine identification method. This study is based on the ITS sequence to identify the source of wild Red Reishi.

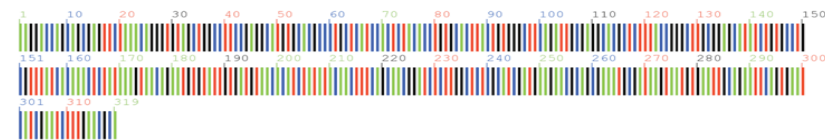
## **XYSY1**

```
CTTGCGCTCCTTGGTATTCCGAGGAGCATGCCTGTTGAGTGTCATGAAATCTTCAACCTA-  
CAAGCTTTTGTGGTTTGTAGGCTTGGACTTGGAGGCTTGTGGCCGTTATCGGTGCG-  
GCTCCTTAAATGCATTAGCTTGGTTCTTGGCGATCGGCTCTCGGTGTGATAATGTCTAC-  
GCCGCGACCGTGAAGCGTTTGGCGAGCTTCAACCGTCTTATAAGACAGCTTTATGACCTC-  
GACCTCAAATCAGGTAGRMMKMCCKCWRWACTTAAGCATATCAATAAGCGGAGGAAA
```



## **XYSY2**

```
AAGGAYYRKYWKCGAGTYYTRMCRGGKGTAGCTGGCCTCCGAGGCATGTGCACGCCCT-  
GCTCATCCACTCTACACCTGTGCACCTACTGTGGGCTTCAGATTGCGAGGCACGCTTTAC-  
CGGGCTTGGCGGAGCATATCTGTGCTGCGTTTATCACAACTCTATAAAGTAACAGAATGT-  
GTATTGTGATGTAACACATCTATACAACCTTTAGCAACGGATCTCTGGCTCTGCATC-  
GATGAAGAACGCAGCGAAATGCGATAAGTAATGTGAATTGCAGAATTCAGTGAATCATC-  
GAATCTTTGAACGCA
```

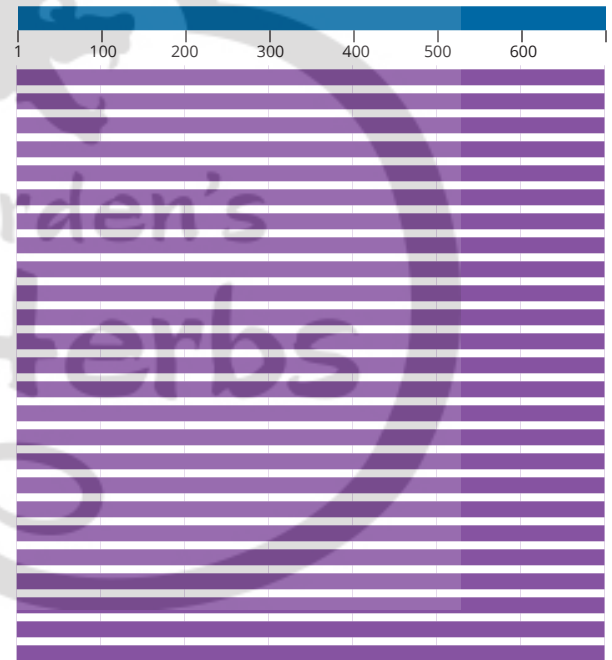
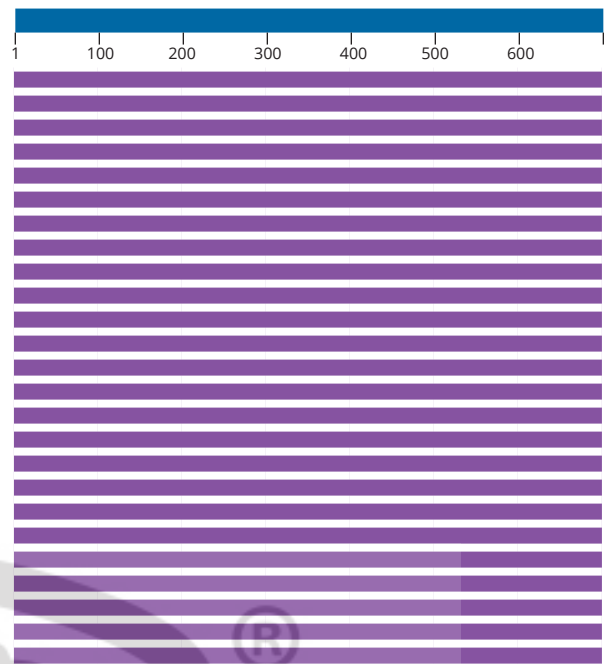


**Conclusion:** Through the processing and analysis of the sample and data, we identified the closest species of the sample to the Latin name ***Ganoderma lucidum***, which identified the highest similarity species as Red Reishi with a maximum similarity of 96.66%.



## Alignment Scores

<40 40-50 50-80 80-200 ≥200



96.7%

96.66% similarity to species:  
***Ganoderma lucidum***