A Big Earth Data Platform for Three Poles

**Plant genome re sequencing data in QTP (2019)**

1、Description

In order to study the relationship between the spread of cyanine and human activities, we will resequence the cyanine varieties from the Qinghai Tibet Plateau and its surrounding areas, as well as Pakistan, India, Nepal, Germany, Japan and other places. At the same time, we will cluster the gene families, and make statistics of unique, shared genes and gene families. In addition, we will also carry out the analysis of gene family expansion and contraction, and system development Tree construction, genome-wide replication events and other analysis. The aim is to analyze the molecular basis of adaptation of traditional species of cyanine to the plateau under the dual pressures of human activities and regional climate. Therefore, this study is helpful to reveal the adaptive mechanism of cyanine to adapt to the plateau ecological environment and the influence of artificial domestication and human selection on its genetic differentiation in the process of evolution.

2、Keywords

Theme：Agricultural Resources  
Discipline：Human-nature Relationship  
Places：Qinghai-Tibetan Plateau  
Time：2019

3、Data details

1.Scale：None

2.Projection：

3.Filesize：48230.4MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：32.0 | - |
| west：95.0 | - | east：97.0 |
| - | south：31.0 | - |

5、Time frame:2019-06-09 00:00:00+00:00--2023-07-09 11:59:59+00:00

6、Reference method

References to data:

DUAN Yuanwen. Plant genome re sequencing data in QTP (2019). A Big Earth Data Platform for Three Poles, doi:10.11888/Socioeco.tpdc.2703942020

References to articles:

Yang, Y.Q., Sun, X.D., Kong, X.X., Wang, C.T., Yang, Y., Yin, X., Yang, D.N., Duan, Y.W., &   
 Yang, Y.P. (2019). The Turnip Genome Provides Insights into Independent Evolution of Glucosinolate Biosynthesis, Nature Communications, 34(4), 848-854.

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

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