A Big Earth Data Platform for Three Poles

**Data of plant DNA in surface sediments of 33 lakes in Qinghai-Tibetan Plateau and arid northwestern China**

1、Description

The data include raw sequencing result of plant DNA in surface sediments of 33 lakes in the Qinghai-Tibetan Plateau and arid northwestern China. We used PowerMax Soil Kit of Qiagen company in Germany to extract DNA, then used universal plant primer g-h (Taberlet et et al., 2007) to amplify P6 loop of chloroplast trnL (UAA) intron in the sample. The PCR products were then sent to Fasteris company in Switzerland for the next-generation paired-end sequencing. The sequencing instrument is Illumina Nextseq 550. The data quality score (Q30) is 81.97.

2、Keywords

Theme：Vegetation,Plant diversity
Discipline：Terrestrial Surface
Places：Qinghai-Tibet Plateau, Arid northwestern China
Time：na

3、Data details

1.Scale：None

2.Projection：

3.Filesize：3173.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：47.1048 | - |
| west：81.2447 | - | east：116.5115 |
| - | south：29.2074 | - |

5、Time frame:None--None

6、Reference method

References to data:

LIU Xingqi, JIA Weihan. Data of plant DNA in surface sediments of 33 lakes in Qinghai-Tibetan Plateau and arid northwestern China. A Big Earth Data Platform for Three Poles, doi:10.5061/dryad.k6djh9w4r2021

References to articles:

贾伟瀚. (2020). 青藏高原与西北干旱区湖泊沉积物中植物DNA的现代过程研究. 北京: 首都师范大学.

Stoof-Leichsenring KR, Liu S, Jia W, Li K, Pestryakova LA, Mischke S, Cao X, Liu X, Ni J, Neuhaus S, Herzschuh U (2020) Plant diversity in sedimentary DNA obtained from high-latitude (Siberia) and high-elevation lakes (China). Biodiversity Data Journal 8: e57089. https://doi.org/10.3897/BDJ.8.e57089

7、Supporting project information

8、Data resource provider

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