A Big Earth Data Platform for Three Poles

**The potential distribution area change of Ophiocordyceps sinensisunder different future climate change scenarios and the spatial distribution pattern change data set of high quality Cordyceps sinensis**

1、Description

Using adenosine content as a quality index of O. sinensis, we developed a comprehensive niche modelling approach to predict the spatial pattern of O. sinensis quality. Based on distribution and quality data for O. sinensis from published field work and experimental data, we separately built a comprehensive habitat suitability model to identify suitable habitats and a spatial quality model to map the adenosine content pattern in O. sinensis. The final model result was defined as the product of the results of the two models. Via this modelling process, we analysed the adenosine content in O. sinensis under baseline climates and different scenarios of future climate change.

2、Keywords

Theme：Biological Resources,Fungus  
Discipline：Human-nature Relationship  
Places：Tibetan Plateau  
Time：2020-2100

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：10.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：40.0 | - |
| west：75.0 | - | east：106.0 |
| - | south：24.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

GUO Yanlong. The potential distribution area change of Ophiocordyceps sinensisunder different future climate change scenarios and the spatial distribution pattern change data set of high quality Cordyceps sinensis. A Big Earth Data Platform for Three Poles, doi:10.11888/Geogra.tpdc.2713932021

References to articles:

Guo, Y., Zhao, Z., & Li, X. (2021). Moderate warming will expand the suitable habitat of Ophiocordyceps sinensis and expand the area of O. sinensis with high adenosine content. Science of The Total Environment, 787, 147605.

7、Supporting project information

asic Science Center forTibetan Plateau Earth System  
the Strategic Priority Research Program of the Chinese Academy ofSciences

8、Data resource provider

name: GUO Yanlong  
unit:   
email: guoyl@itpcas.ac.cn