A Big Earth Data Platform for Three Poles

**Physiological response of Ammopiptanthus mongolicus to drought stress**

1、Description

Through the observation of tissue sections of root system, stem and leaf of Ammopiptanthus mongolicus, it is found that Ammopiptanthus mongolicus has morphological characteristics of efficient absorption, transportation and storage of water. Through the study of physiology and biochemistry of Ammopiptanthus mongolicus, the physiological and molecular mechanism of Ammopiptanthus mongolicus adapting to water stress through osmotic adjustment under drought stress was preliminarily confirmed. Through the study of physiological characteristics of Ammopiptanthus mongolicus under drought conditions, the change rule of proline accumulation with the process of drought stress was found, which may participate in the regulation mechanism of Ammopiptanthus mongolicus adapting to water stress as an important osmotic regulator. Furthermore, 7 full-length genes involved in proline synthesis, metabolism and transport of Ammopiptanthus mongolicus were cloned and obtained.

2、Keywords

Theme：Vegetation,Ammopiptanthus mongolicus,Physiological indexes  
Discipline：Terrestrial Surface  
Places：Heihe River Basin  
Time：2012

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：1.69MB

4.Data format：PDF

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.62545 | - |
| west：103.10507 | - | east：103.10507 |
| - | south：38.62545 | - |

5、Time frame:2013-01-06 19:14:00+00:00--2016-01-05 19:15:00+00:00

6、Reference method

References to data:

SU Yanhua. Physiological response of Ammopiptanthus mongolicus to drought stress. A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2726772016

References to articles:

7、Supporting project information

8、Data resource provider

name: SU Yanhua  
unit:   
email: yhsu@issas.ac.cn