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[1]董守坤,赵坤,刘丽君,等.干旱胁迫对春大豆叶绿素含量和根系活性的影响[J].大豆科学,2011,30(06):949-953.  
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## 干旱胁迫对春大豆叶绿素含量和根系活性的影响

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作者: 董守坤<sup>1</sup> (KeySearch.aspx?type=Name&Sel=董守坤); 赵坤<sup>2</sup> (KeySearch.aspx?type=Name&Sel=赵坤); 刘丽君<sup>1</sup>  
(KeySearch.aspx?type=Name&Sel=刘丽君); 孙聪姝<sup>1</sup> (KeySearch.aspx?type=Name&Sel=孙聪姝); 郭茜茜<sup>1</sup>  
(KeySearch.aspx?type=Name&Sel=郭茜茜); 阮英慧<sup>1</sup> (KeySearch.aspx?type=Name&Sel=阮英慧); 王利彬<sup>1</sup>  
(KeySearch.aspx?type=Name&Sel=王利彬)

1. 东北农业大学 农学院, 黑龙江 哈尔滨150030;  
2. 黑龙江省鹤山农场, 黑龙江 嫩江161443

Author(s): DONG Shou-kun<sup>1</sup> (KeySearch.aspx?type=Name&Sel=DONG Shou-kun); ZHAO Kun<sup>2</sup> (KeySearch.aspx?  
type=Name&Sel=ZHAO Kun); LIU Li-jun<sup>1</sup> (KeySearch.aspx?type=Name&Sel=LIU Li-jun); SUN Cong-shu<sup>1</sup>  
(KeySearch.aspx?type=Name&Sel=SUN Cong-shu); GUO Qian-qian<sup>1</sup> (KeySearch.aspx?type=Name&Sel=GUO Qian-  
qian); RUAN Ying-hui<sup>1</sup> (KeySearch.aspx?type=Name&Sel=RUAN Ying-hui); WANG Li-bin<sup>1</sup> (KeySearch.aspx?  
type=Name&Sel=WANG Li-bin)

1. College of Agriculture, Northeast Agricultural University, Harbin 150030, Heilongjiang;  
2. Heshan Farm of Heilongjiang Province, Nenjiang 161443, Heilongjiang, China

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摘要: 以抗旱性不同的3个春大豆品种为材料,对各生育时期不同干旱胁迫条件下叶片叶绿素含量、根系活力和根系相对含水率的变化进行了研究。结果表明:随干旱胁迫程度的增加,叶绿素含量、根系相对含水量显著降低;根系活力(苗期>开花期>结荚期>鼓粒期,根系相对含水量鼓粒期>结荚期>开花期>苗期)。在干旱胁迫条件下,叶绿素含量在苗期、根系活力在苗期、开花期和结荚期,均表现为黑农57>改良168>绥农26;根系相对含水量在中度干旱胁迫下黑农57>改良168>绥农26。当田间持水量为30%~75%时,根系相对含水量与叶绿素含量呈极显著正相关,与根系活力呈极显著负相关。

Abstract: In order to research the effect of drought stress on soybean physiological property, chlorophyll content, root activity and root relative water content of three spring soybean varieties with different drought resistance were determined under drought stress. The results showed that chlorophyll content and root relative water content decreased significantly with the increase of drought stress, the root activity was seedling >flowering >pod-setting >seed-filling, the root relative water content was seed-filling >pod-setting >flowering >seedling. The chlorophyll content in seedling and root activity in seedling, flowering, pod-setting were Heinnong 57>Gailiang 168>Suinong 26 under drought stress. The root relative water content was Heinnong 57>Gailiang 168>Suinong 26 under moderate drought stress. Under field moisture capacity of 30%~75%, root relative water content significant positively correlated with chlorophyll content, while significant negatively correlated with root activity.

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第一作者简介: 董守坤(1978-), 男, 博士, 助理研究员, 研究方向为大豆栽培生理。E-mail: dongshoukun@yahoo.com.cn.

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