

育种与栽培

不同基因型稻草蛋白质含量的差异评价

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摘要:

利用20份水稻种质测定其糙米及稻草的蛋白质含量,并分析糙米及稻草蛋白质含量与主要农艺性状的相关关系。结果表明:不同基因型水稻糙米及稻草的蛋白质含量有着明显的差异,糙米蛋白质含量范围在8.38%-15.78%,而稻草的蛋白质含量范围在3.58%-6.93%。水稻05-518和05-519为地方品种,糙米蛋白质含量分别为14.70%和15.778%,比对照品种“中作93”分别高60.6%和72.5%;而05-529和05-583为新培育的种质。其稻草蛋白质含量分别为6.93%和6.41%,比对照品种“中作93”分别高44.7%和33.8%。水稻糙米的蛋白质含量与抽穗天数呈显著的负相关,而稻草蛋白质含量与秆长呈极显著的负相关。

关键词: 糙米 稻草 蛋白质含量 农艺性状

Evaluation of Protein Content for Straw by Rice Genotype

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Abstract:

Protein contents of brown rice and straw for twenty rice materials were evaluated, and correlation between protein content of brown rice and straw and main agronomic traits were analyzed. The results showed that there were obvious difference for protein contents of brown rice and straw among rice genotype. Protein contents of brown rice were from 8.38% to 15.78%, while protein contents of straw were from 3.58% to 6.93%. Among them, 05-518 and 05-519 were local rice, and their protein contents were 14.70% and 15.78%, respectively, were higher than that of control variety "Zhongzuo93" for 60.6% and 72.5%, respectively. 05-529 and 05-583 were new breeding lines, and their protein contents of straw were 6.93% and 6.41%, respectively, were higher than that of control variety "Zhongzuo93" for 44.7% and 33.8%, respectively. Protein content of brown rice was significantly correlated with days to heading, and protein content of straw was significantly associated with culm length.

Keywords: brown rice straw protein content agronomic traits

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