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摘要：本文采用生物发光法测定玉米籽粒中ATP含量，ATP在0.01~0.5 $\mu\text{g}/\text{mL}$ 的浓度范围内，最大发光强度与浓度的对数成线性关系，线性回归方程 $Y=0.9973x+3.6651$ ，相关系数为0.9991；RSD值为1.727%；检出限为 $7.80 \times 10^{-5}\mu\text{g}/\text{mL}$ ；平均回收率94.5%，灵敏度、精密度高，结果准确。此法可用于玉米籽粒中ATP含量的测定。

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## Determination of ATP in maize kernel by bio luminescence

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Abstract: The contents of ATP in maize kernel were determined by bio Luminescence. A linear calibration graph which was  $y=0.9973x+3.6651$  ( $r=0.9991$ ), was obtained in the range of 0.01 $\mu\text{g}/\text{mL}$  to 0.5  $\mu\text{g}/\text{mL}$  with detection limit of  $7.80 \times 10^{-5}\mu\text{g}/\text{mL}$  for ATP. The RSD value was 1.727% and the average recovery of ATP was found to be 94.5%. The method was sensitive and accurate, can be applied to determinate the contents of ATP in plant organs.

Key words:

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