

發芽米之抑制血管收縮素轉化酵素活性及生物活性成分之研究

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摘要

在本論文中，選用兩種糙米：台梗9號(TJ9)及台中秈10號(TC110)，進行血管收縮素轉換酵素(ACE)抑制活性及生物活性成分(γ-氨基丁酸、β-谷維素、生育醇、生育三烯酚)試驗。糙米發芽條件為溫度(37℃)、時間(24、36、48小時)、無通空氣及浸泡液(蒸餾水、谷氨酸溶液)。ACE抑制活性以分光光度計檢測，生物活性成分以HPLC檢測。本研究目的以糙米經由不同條件催芽所得之發芽米檢測ACE抑制活性及生物活性成分含量。結果顯示：TC110以蒸餾水發芽後經由15%乙醇萃取之萃取液有最高ACE抑制活性(87%)，而TJ9以谷氨酸溶液發芽後經由水萃取之萃取液有最高ACE抑制活性(88%)；γ-氨基丁酸含量以TC110及TJ9兩者於谷氨酸溶液發芽後為最高，分別為99.27及99.02 mg/100g；β-谷維素含量以TC110及TJ9兩者於蒸餾水發芽後為最高，分別為67.6及71.02 mg/100g；生育醇含量以TC110及TJ9兩者於蒸餾水發芽後為最高，分別為0.76及0.89 mg/100g；生育三烯酚含量以TC110及TJ9兩者於谷氨酸溶液發芽後為最高，分別為0.41及0.44 mg/100g。由以上結果得知，糙米經由不同條件催芽後，可提高ACE抑制活性及生物活性化合物的含量，且皆高於未發芽之糙米。可建議國人，糙米發芽後可用於日常烹飪作為保健食品使用。

關鍵詞：台梗9號、台中仙10號、γ-氨基丁酸、β-谷維素、生育醇、生育三烯酚

目錄

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