

Studies on the Fibrinolytic Effect of Germinated Grain Seeds

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Abstract

In this study, seven grain seeds(sorghum, maize, buckwheat, soy bean, mung bean, red bean, and barngrass) and germinated seven grain seeds were examined the fibrinolytic activity through fibrin plate assay and SDS-PAGE.

The results obtained were as follows :

1. In the fibrin plate assay, the extracts of maize, barngrass, sorghum and buckwheat showed fibrinolytic activity. Especially, Maize of them showed fibrinolytic activity that was almost similar to plasmin, fibrinolytic enzyme used as a positive control.
2. In the SDS-PAGE of seven grain seeds, fibrinolytic activity was remarkably shown in mung bean and red bean.
3. In the fibrin plate assay of germinated grain seeds, buckwheat(5 mm), buckwheat(10 mm) and soy bean(10 mm) showed a level of fibrinolytic activity that was about 0.3 fold than 1.0 unit of plasmin. Also maize(10 mm) of them showed a level of fibrinolytic activity that was about 0.5 fold than 1.0 unit of plasmin.

As a result, maize of grain seeds was found that it has a strong fibrinolytic activity.

Key words : germinated grain seeds, fibrinolytic activity