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Alpha-glucosidase Inhibitory Activities of Soybean Sprout and *Phyllostachys pubescens* Mazel

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Alpha-glucosidase is the enzyme to digest carbohydrate, and inhibition of alpha-glucosidase could suppress postprandial hyperglycemia. Fractions isolated from methanol extracts of soybean sprout and *Phyllostachys pubescens* Mazel were tested for the inhibitory activities against alpha-glucosidase *in vitro*. Methanol extracts of soybean sprout and *Phyllostachys pubescens* Mazel were subsequently subjected to sequential fractionation with hexane, ethylacetate, buthanol and water. Among the fractions tested ethylacetate-soluble fractions showed relatively strong inhibitory activities against the enzyme. Ethylacetate-soluble fractions of soybean sprout and *Phyllostachys pubescens* Mazel inhibited yeast alpha-glucosidase by 36.3% and 40.3% at the concentration of 5 mg/mL, respectively. Acarbose, an alpha-glucosidase inhibitor, which is used for the treatment of diabetes mellitus inhibited the enzyme activity by 40.1%. Thus, it could be concluded that ethylacetate-soluble fractions of soybean sprout and *Phyllostachys pubescens* Mazel could be an effective agent for controlling hyperglycemia in diabetes mellitus.