EFFECTS OF SALTS ON THE SWEETNESS OF THAUMATIN

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Summary

The effects of salts on the sweet taste of sweet protein; thaumatin were examined by the psychophysical method. The threshold value of sweetness of thaumatin; 50 nM, increased with an increase of NaCl concentration, meaning the sweetness of thaumatin was depressed by NaCl. Sodium phosphate and calcium chloride were more effective to depress the sweetness of thaumatin than NaCl. The sweetness of thaumatin was not detected up to 500 nM in the presence of 5 mM CaCl₂. In the case of ethylenediamine tetraacetate (EDTA) the sweetness of thaumatin was increased at low concentration and at high concentration it decreased with an increase in the concentration of EDTA.