

POTENTIAL α -AMYLASE AND α -GLUCOSIDASE INHIBITORY ACTIVITIES
OF BIOACTIVE FRACTIONS FROM CALAMANSI
(*Citrofortunella microcarpa*) PEELS

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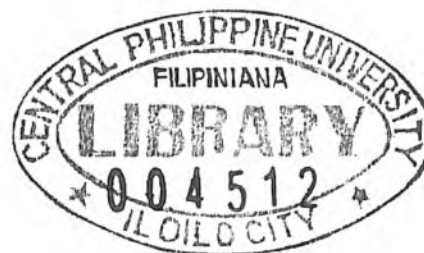
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ABSTRACT

Calamansi fruits are commonly used in the Philippines and the peels are discarded as wastes. Epicarpium of calamansi peels were selected for analysis in this study in order to determine their potential *in vitro* inhibition of α -amylase and α -glucosidase, enzyme markers of diabetes mellitus. The potential inhibition of the six fractions against α -amylase ranged from 6.5% to 34.2%, with the acetone-methanol (4:1) fraction having the highest percentage inhibitory activity of $34.2\% \pm 3.3$. However, only two fractions showed inhibition against α -glucosidase with acetone-methanol (4:1) extract having the higher percentage inhibitory activity of $12.3\% \pm 1.7$. Thus, epicarpium from calamansi peels have moderate to low inhibitory activity against α -amylase and α -glucosidase, respectively. Results of this study provide useful information for development of calamansi peels into nutraceuticals that could help with diabetes management.