



## Multiple Amylase inhibitor from *Withania somnifera*: Role in post-harvest pest management and food (potato) processing

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A glycoprotein alpha amylase inhibitor ( $\alpha$ -AI), molecular weight of 8.3 kDa, was isolated and purified from seeds of *Withania somnifera* (WSAI), an important indigenous medicinal plant. It is thermostable and non-competitive type inhibitor of fungal amylase. Mass spectrometric analysis revealed that it shares 59% sequence similarity with Wrightide II type  $\alpha$ -AI from *W. religiosa*. When the adults of *T. castaneum* were fed with WSAI (1.6 mg/g), decrease in consumption, growth and efficiency of conversion of ingested food were evident along with over 4-fold increase in feeding

Accomplished 5+ years of research experience in leading, national and international research institutes which works in the field of development of Bio based Agriculture and pharmaceutical formulations, Bio-industrial proteins/enzymes purification, Recombinant protein technology. An excellent team player and strong prolific collaborations builder in aspects of basic and applied research and research

[6<sup>th</sup> Global summit on Herbals and Traditional Medicine , June 10-11, 2020, Webinar](#)

Sainath S. Kasar, [Amylase inhibitor from \*Withania somnifera\*: Role in post-harvest pest management and food \(potato\) processing](#), [Herbals Summit 2020](#), [6<sup>th</sup> Global summit on Herbals and Traditional Medicine , June 10-11, 2020, Webinar](#)



Amylase inhibitor from *Withania somnifera*: Role in post-harvest pest management and food (potato) processing, A glycoprotein  $\alpha$ -amylase inhibitor from *Withania somnifera* differentially inhibits various  $\alpha$ -amylases and affects the growth and development of *Tribolium castaneum*,