
PLANT - BASED SQUALANE COMPOSITIONS FOR APPLES AND PEARS TO REDUCE SUPERFICIAL SCALD

DESCRIPTION

Superficial scald is a Physiological disorder that occurs mostly in apples and pears. It is one of the most common problems during the post harvest and storage, as well as being the cause of rejection of international shipments of these fruits. The research team of the University of Talca, led by Carolina Torres, PhD. in Horticulture, has managed to develop a new natural antiscaids for pears and apples. Currently, there is a formulation potentially marketable in the short term for pears, 100% natural, with high efficacy to prevent superficial scald in prolonged guards with beneficial effects for the quality and condition of the fruit. Formulation at a plant-based Squalane composiotis for apples and pears, which serves to prevent superficial scald (oxidation) of pears and apples during the post-harvest and storage stage.

CURRENT DEVELOPMENT STAGE

TRL 7

Validated at pre-comercial scale in operating environment. Provides greater firmness and color to the fruit. The new antiscaiding has been validated to semi-industrial scale in Chile and United States, both in pears like apples. The tests were performed in both controlled atmosphere (AC) as in conventional cold (FC).



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PORTFOLIO



PROTECTION

PCT APPLICATION

Application Number : PCT/CL2017/050010.
Publication Number : WO2018161184A1.
Application Date : **08 Mar 2017**

ARGENTINA APLICATIO

Application Number : ARP20170103044.
Publication Number : AR110032A1.
Application Date : **08 Nov 2017**

CHILE APPLICATION

Application Number : CL201902351.
Publication Number : -
Application Date : **20 Aug 2019**

PERU APPLICATION

Application Number : 001787-2019/DIN
Publication Number : -
Application Date : **28 Aug 2019**

EUROPE APPLICATION

Application Number : 17900213.4
Publication Number : -
Application Date : **27 Aug 2019**

EEUU APPLICATION

Application Number : 16/490,046
Publication Number : -
Application Date : **28 Aug 2019**

COMPETITIVE ADVANTAGE

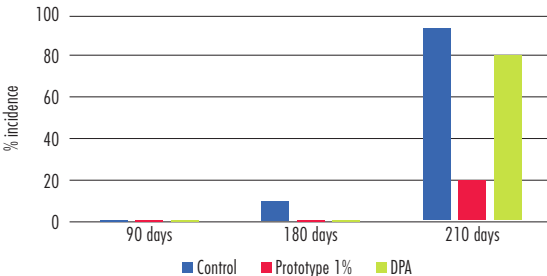
Active ingredient [a.i.] Plant-based Squalane (antioxidant).other physiological disorders. A.I is readily available through identified distributors. Low ethylene production. Maintains the organoleptic properties of the fruit. It prevents the appearance of other physiological disorders. High efficacy preventing superficial scald [76 to 100% control] under different storage conditions for Apples and Pears. Additional positive effects on fruit quality (color, firmness, lower ethylene production, texture and overall appearance). Applied postharvest. It could be marketed as an "Plant-based antioxidant coating" potentially reducing regulatory requirements.



Control

Prototype

Packham's Triumph, Chile. 2017. Commercial application (full bins)
RA Storage



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