A REVIEW ON THE EFFECT OF PVA/CHITOSAN BLEND ON THE CHEMICAL AND PHYSICAL PROPERTIES OF EDIBLE FILM

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ABSTRACT

THE REVIEW ON THE EFFECT OF PVA/CHITOSAN BLEND ON THE CHEMICAL AND PHYSICAL PROPERTIES

PVA and chitosan have both been used in different ways in different industries. This isn't actually the truth, though, when it comes to food-related application, since neither of these two materials is good enough on its own to be used as food packaging. Many studies have been done on this problem, and the problem can be solved by blending the two materials. It is possible to make PVA and chitosan films into edible films by including edible fillers into the film manufacturing process. Fillers made from biopolymers like Zein (ZN), starch (St), and many others have been added to the PVA/CS formula to make edible film for food packaging. The purpose of this research is to review the effect of PVA/CS blend on the chemical and physical properties of edible film. Scanning electron microscopy (SEM) and X-ray diffraction were the analytical techniques that were utilised in order to characterise the films. The production of food packaging made from biopolymers is a positive step toward lowering pollution levels and leading a life that is more sustainable. This is a temporary solution. In addition, given today's technological advancements, it may not be too far-fetched for researchers to create food packaging that is harmless to humans and the environment, while also retaining its functionality and capacity to be sustainably used.