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The significance of Maillard reaction for species - specific detection gelatine in food industry (Conference Paper) (Open Access)

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Abstract

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Many ingredients derived from animal have been distributed widely in foods, pharmaceutical, and cosmetic formulations which may invites issues due to religious restrictions. Thus, the species - specific detection has become an important issue among Muslims, Jews, Hindus, Vegan, and vegetarian communities. Some methods such as spectroscopy, chromatography, and DNA based method have been applied for this purpose. However, these methods use sophisticated technology, therefore need high skill and cost for industrial practice. Research needs to encourage the development of simple and portable instrument. This paper highlights the potency of the Maillard reaction for species - specific detection of animal derivatives in food , especially for gelatine . Gelatine from different sources revealed different amino acids composition. It will produce various sensory of active compounds such as colour, odour, and taste when subjected to Maillard reaction , depends on reactant substances and conditions of reaction . The differences will be the key principle in species - specific detection of the sources of gelatine . © Published under licence by IOP Publishing Ltd.

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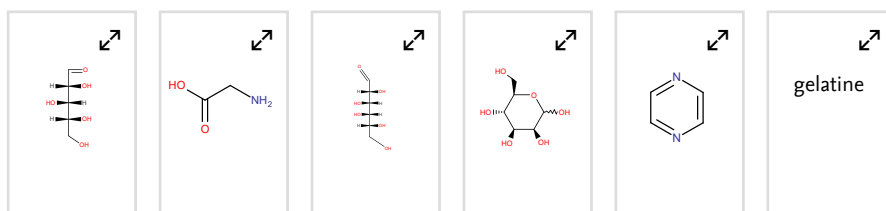
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