

AMINO ACID ISOLATION FROM ANIMAL WASTE HYDROLYSATES

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Nowadays, great accent is placed on the ecological approach to the use of chemicals, especially in the chemical and engineering industries. The aim is also to use waste animal materials that would otherwise remain unused and deposited in municipal landfills, or disposed of in incinerators, even though they represent a rich source of valuable organic substances, especially amino acids. The advantage of these processed raw materials is easy biodegradability. In addition, hydrolysates from them can be advantageously used not only as fertilizers for agricultural crops, but also as chelating agents to remove undesired metals from coolants in metalworking or as complexing agents in the case of removing heavy metals from soils.

Energy-demanding recommended methods, such as sublimation (Glavin and Bada, 1998), liquid chromatography (Blattmann et al., 2020), ion exchange chromatography (Alia et al., 2019) or enzymatic procedures (Moustafa and Petersen, 1962), are not acceptable for common applications.

The advantage of hydrolysates from waste animal sources is their biological origin, low acquisition costs and easy accessibility. Suitable processing can achieve versatile use in many fields of industry.

Literature

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