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Simultaneous Agglomeration and Drying of Distillers Grains to Produce Spherical Pellets (Granules) in a Rotary Drum Dryer

A process converts abundant ethanol byproduct (DDGS) into uniform, microsized particles for use as a natural, potentially time-release, chemical carrier in applications like agriculture.

As ethanol production continues to ramp up, the volume of remnant by-product of dried distillers grain solids (DDGS) is becoming a bigger issue. Current uses include animal feed; however, only certain domestic animals can digest it as a meaningful feed.

Researchers at Purdue University have developed a process for using DDGS as a natural carrier for chemicals. Because it is known that grain will absorb moisture, researchers developed a process for reducing the DDGS to a uniform, microsized particle, coated with water-based chemicals. These tiny particles can spread uniformly across an intended area and have the potential for time-release delivery.

Advantages:

-Useful application for DDGS, which is abundant, but has limited

applications

-Potential use for time-release delivery

Potential Application:

-Agriculture

TRL: 6

Intellectual Property:

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Chemicals & Advanced Materials/Specialty & Performance Chemicals

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