'Sweeter' plastic

A University spinoff company is using corn to make plastics and provide cleaner air. Tetramer Technologies LLC is adding corn to plastic containers — and cars, airplanes and golf clubs — while creating jobs along the way.

Clemson professor Dennis Smith and his research group have found a new way potentially to replace up to 50 percent of the chemicals that make regular plastics with polylactic acid, a byproduct of corn. The end product is a plastic that has both the environmental friendliness of the corn-based product and the durability of regular plastics, and it's biodegradable.

This new material could reduce by 5 billion pounds per year the amount of single-use, nonbiodegradable plastics discarded by consumers. And it could reduce the air pollutants from plants that produce plastics for everything from cars to airplanes to golf clubs.

Tetramer, led by Earl H. Wagener '62, PhD '67, received a $100,000 innovative research award from the National Science Foundation (NSF) to demonstrate the commercial feasibility of plastics partially derived from renewable sources like corn. This award builds on a $500,000 award and two other $100,000 grants received from the NSF small business program.