

In March of 2015, I wrote about the single-use, plastic bag; a serious waste pollution problem. Unfortunately, since then, little has changed regarding this crisis. With the countryside now void of crops, one does not have to look far to see this ugly form of pollution fluttering in the wind as these throw-away bags cling to crop stubble and other remnants of vegetation.

For decades, single-use plastic bags have generated an aesthetic problem and of late have become a bigger problem in landfills and throughout waterways. The majority of these bags are non-biodegradable. When something is classified as non-biodegradable, it means the materials from which it is made cannot be broken down into their base compounds by microorganisms, air, and moisture in a reasonable amount of time. Thus, it can take thousands of years before these bags will completely decompose. Such waste is a critical environmental concern. Did you know that we gardeners have become a major contributor to another environmental problem, also involving non-biodegradable materials?

Imagine for a moment, as spring draws near, you are dreaming of kneeling by your flower border, removing new seedling plants from their flowerpots and planting them. With eager anticipation, you continue to dream about how these new plants will soon beautify your landscape. Herein lies the problem— how do you dispose of the flowerpots?

Most disposable flowerpots are made of non-biodegradable, petroleum-based plastic materials, and most will likely end up in the landfill as garbage. Statistics show that Americans place well over 200 million pounds of non-biodegradable, petroleum-based, plastic flowerpots into the landfill every year. That is a lot of garbage. Something has to change. How about considering using flowerpots made from plants, for plants?

I recently discovered there are plastic flowerpots that are biodegradable. Furthermore, they are self-feeding, with plant food built into the flowerpot walls. All one needs to do is plant the entire flowerpot including the plant. The result is no waste. While the pot decomposes, its organic nutrients feed the plant. For years, most gardeners have been aware of flowerpots made of pressed peat moss. Such pots work similarly, but in this case, I want to emphasize these plastic flower pots are very biodegradable!

Recently, friends of mine gave me a biodegradable plastic flowerpot associated closely with a unique business in Laurel, NE, called *Bio Composite LLC*. This business produces and markets a product called Bio-Res™. Bio-Res™ is an environmentally friendly product made from distiller's grain, a non-toxic by-product of corn ethanol production. The product can be blended with various resins in manufacturing plastic flowerpots that are biodegradable. This type of plastic is often referred to as PLA plastic, a plastic derived from a renewable resource—such as cornstarch or sugar cane. Since the composition of the walls of this flowerpot are derived from natural plant materials, as the flowerpot decomposes, its walls provide protein-rich plant food to the growing plant's roots. I do not know how you feel, but I am thinking this product offers great potential in reducing the landfill pollution problem created by non-biodegradable flowerpots.



As mentioned earlier, flowerpots made of petroleum-based, non-biodegradable plastic may take up to a thousand years to degrade. My investigation has revealed that PLA flowerpots begin to biodegrade within three to six months resulting in carbon dioxide, water and biomass.

It is my hope that the horticulture industry investigates more closely the use of these types of flowerpots in the future. Surely, a decomposable flowerpot with built-in plant food that naturally feeds the roots of plants is more efficient and environmentally safe than a non-biodegradable flowerpot or plastic bag filling our landfills as garbage and remaining there for thousands of years. Should you feel as I do, perhaps while purchasing nursery stock this spring, you might ask the garden center if they are, or will be, using biodegradable flowerpots. It is a smart environmental move.