

## **Biodegradable Mulch an Effective Production Tool in Agriculture and Gardens**

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"Biodegradable mulch is production tool to make agricultural plastics more environmental friendly."

After many years of collecting, transporting and recycling agricultural plastic waste derived from polyethylene mulch film, evidence demonstrates the struggle, costs and technical difficulties in handing the end of life of this useful production tool.

Mulch films are globally recognized as a functional tool adding many benefits such as weed and moisture management and increased yields just to name a few. Post-harvest mulch fill is very dirty and can contain as much as 60-70% dirt by weight. Washing, drying and end market value is a challenge for the industry. The largest global producers use very thin gauges as low as 8 microns which present a high degree of difficulty in collecting and discarding resulting in Industry concern of soil contamination over many years.

The solution proposed is to use a biodegradable mulch film that can be left and plowed into the field. Biodegradable mulch films are consumed through the soil's microorganisms. This activity provides soil enhancement NOT contamination as in the case of conventional PE mulch film.

The manufacturing and application of biodegradable mulch can be used on standard equipment at both the blown film facility and the farm's production film applicator. Film integrity during growing season and harvest is targeted for specialty crops and specific conditions.

During the last 5 years, BASF's new ecovio® mulch has been tested and supported by agricultural research stations in France, Spain and Italy, BASF enabling successful commercialization with European farmers. Ecovio is now commercialized in Europe and is being tested in Asia and the America's.

Tests were performed on specialty crops and new crops: maize, sugar-beet and tobacco.