



Biodegradable Plastic:

Still not permitted, but stay tuned....

Eric Sideman, Organic Crop Specialist

Nowhere else in the world is synthetic / non-synthetic used as the primary criteria to determine whether a substance is compatible with organic production. But, the USDA National Organic Program (NOP) does. Under USDA Organic Standards, materials used in organic production are either natural (non synthetic), or are reviewed and put on a list of permitted synthetic materials. The alternative approach used by organic programs, which is much more common around the world, is a positive list that is a list of what is allowed. At the time the organic Rule was written, the synthetic/non-synthetic line was probably the best approach because it protected the integrity of organic from unfriendly folks at the USDA pressuring the NOP to allow materials that were not in line with historical organic production. If there were a simple positive list back then there would have been many things on it that would look very out of place to us organic folks. In the beginning the synthetic/non-synthetic line worked very well, even though it may have had to be blurred a bit at times to allow things that we organic growers were all using.



Now that we are 10 years into using the synthetic/non-synthetic line, we are coming up against too many material considerations that may need too much blurring of that line, i.e., materials are being considered for organic production that may very well meet the integrity of organic but may be synthetic, strictly speaking. Although we may not be stuck with this line forever as more and more people recognize this weakness, we are stuck with it now.

One of the materials that may be in line with the mission of organic farming, but is synthetic, is biodegradable plastic mulch. BioTelo is the most well known brand. Biodegradable mulches are on the positive list in Canada and Europe and elsewhere, but in the USA it is not allowed because it is synthetic and the manufacturer has, until very recently, not followed the procedure for getting the material on the USDA/NOP list of synthetic materials allowed in organic production. The way that it is done is that a petition is submitted, the NOSB reviews the petition against the criteria in the Rule and makes a recommendation to the NOP, and then the NOP decides whether to list or not list. Finally, last month a petition to add biodegradable plastic mulch to the list of permitted synthetic materials was submitted. Of course, it may be years before it works its way through the system. That is not all bad because the system will give it a very thorough review of compatibility with organic.

Biodegradable plastic is synthetic. The plastic may be made using natural raw materials. However, the way they turn these natural materials (e.g., corn starch) into a plastic is through chemical reactions that create polymers. Following the Organic Rule, such a synthetic material has to be reviewed against the criteria presented in Section 205.600. You all could get a copy of this but basically it includes considering things like how the substance is manufactured, whether use and disposal has adverse effects on the environment, whether the substance is harmful to human health, whether there are natural alternatives, etc. I am not sure what criteria those organic standards with a positive materials list (e.g., Canada) used when approving biodegradable plastic, but I hope they were as good as the criteria the USDA/NOP uses. And, I hope that after the review it turns out that BioTelo meets those criteria. In the trials of BioTelo that I have seen it has worked very well. And it sure will be a pleasure not to see truckloads of plastic head off to the landfill at the end of the season.

