

The Big Compost Experiment – Fact checking

Frontiers recently published the results of a [UCL study](#) of home composting among a panel of volunteers in the UK. This article was picked up by the press, turning the findings into catchy headlines, which in turn led to doubts about the ability of certified compostable products to actually compost.

While a punchy headline can capture attention, only by examining the content of the study can relevant conclusions be drawn.

The laudable and interesting aim of the UCL study is to check whether home compostable products are actually compostable. And if we analyse the study in detail, we conclude that it is not a scientific study on the compostability of man-made products, certified compostable at home or not, but a social study on the behaviour of composters.

Home composting is an art Testing is a profession

In 2019, ADEME, the French national government agency for the environment, conducted a large scientific test on different home composting configurations and demonstrated that certified home compostable plastics disappear entirely in a properly maintained compost.

This study highlights the importance of regular stirring to aerate the compost and confirms the good correlation between the lab tests leading to certification and the real conditions.

The major difference between the ADEME study, a quantitative professional science research, and the UCL one, a qualitative citizen science study, is that accurate conclusions can be drawn from the former and very little from the latter because of the imprecision of the instructions and the poor consistency check of the data submitted (only 50 images checked out of the 1307 results submitted).

Some examples next page, [taken from the study's photo gallery](#), illustrate the poor quality/reliability of the information collected.

In any case, the results of these tests should normally have been excluded from the analysis when reviewing the data which is not the case and we regret it.

More details about **OK compost** and **TÜV AUSTRIA** on www.okcompost.org and on [YouTube](#)

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[OK CERTIFICATION CENTER](#)

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*On 1 December 2017, TÜV AUSTRIA Group integrated the **OK compost** & **OK biobased** conformity marks and certification activities into the newly founded subsidiary **TÜV AUSTRIA Belgium**.*

The most obvious bias is the methodology advised by the organisers. Putting the objects to be tested in (non-biodegradable) nets is a classic technique, but the participants should have been told to mix the bags/films with a little compost before putting them in the nets and above all, to avoid putting the bags/films in balls (sometimes compressed) in the nets.

As a result, the surface area to be attacked by micro-organisms will be considerably reduced and the number of layers to be attacked will be greatly increased (the mille-feuille effect). Under these conditions, it is obvious that disintegration will be slowed down.

And how to differentiate possible residual pieces after testing, if the instructions (wide mesh netting with indelible identification) are not followed.

The duration of composting varies from 3 to 18 months. We can only be surprised by the quality of the compost shown here, given that it is the result of 15 months of composting. The plastics are still clearly visible, but so is the bio-waste. Composting is definitely an art, not a way to escape the tax on household waste collection...

Worse still, can we really talk about home composting in the cases illustrated below?

