

Project Update: October 2022

The organic matter contained in the samples was digested with potassium hydroxide, leaving the product in the stove for 48 hours (see Fig. 1). Once out of the stove, it was proceeded to segregation, taking the supernatant from the organic matter, which was filtered to collect the microplastics. (See Fig. 2). They are placed in glass jars for further observation under the stereomicroscope (Discovery V8, Zeiss) Fig. 3.



Figure 1: Samples in the organic matter digestion process. Figure 2. Sample filtering through two different meshes.

Every plastic piece was collected with a needle (see Fig. 4) and placed in a glass vial for storage. Small plastic pieces were found and easily seen at a glance in some samples. These samples were observed under the microscope, taking aliquots until finalising every sample. Different microplastics (see Fig. 5) of green, black, red, pink and blue colours were observed. The majority of them being fibres, in addition to finding fragments and flakes.



Figure 3. Stereomicroscope (Discovery V8, Zeiss) Figure 4. Collection of fibers.

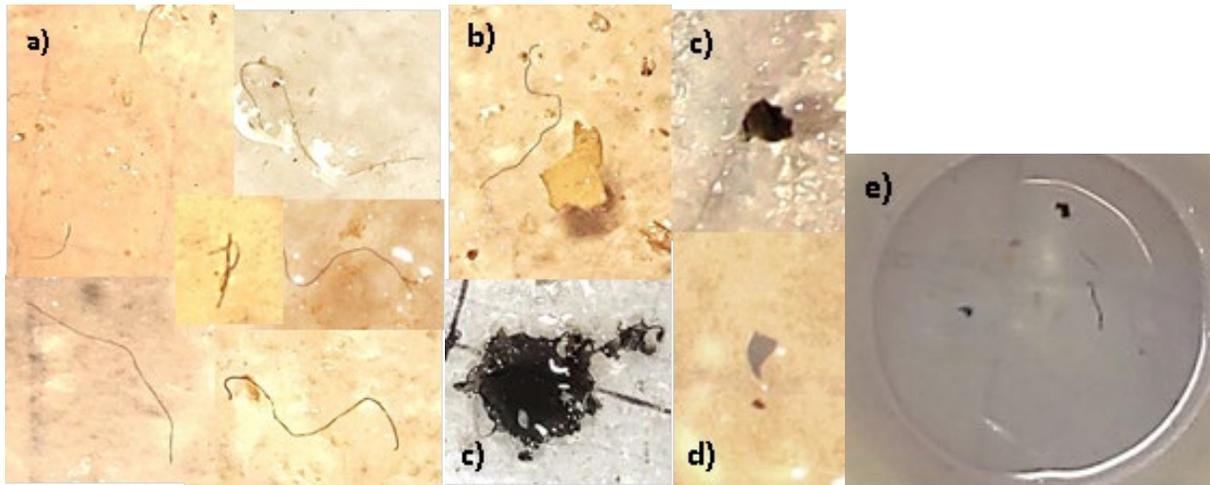


Figure 5. Microplastics found in samples a) fibers, b) fragments and fibers, c) fragment, d) flake and e) microplastics in vial jar.