

A new protocol to extract the DNA from one soil ciliate that has been identified under the microscope

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SUMMARY

We established a new protocol that allows DNA extraction from one specimen of a soil ciliate that has been observed under the microscope. In this method, we first observed and identified a single soil ciliate in a drop of sterilized water on a glass slide under a microscope. When the water had almost dried, the soil ciliate was crushed with a piece of filter paper (1.5 mm × 1.5 mm). The piece of filter paper that contained the soil ciliate remains was then immediately placed into a PCR buffer and used as the DNA template. A suitable condition was determined to identify the soil ciliate's species. The species identified through DNA analysis was the same as the forms observed under the microscope.