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In active volcanic regions, soils are repeatedly exposed to eruption products, notably tephra emissions. Deposition of volcanic tephra on soil may modify water and gas exchanges between the soil surface and the atmosphere. Through chemical weathering, the silicate glass and mineral components of freshly deposited tephra act as a source of bioavailable potassium and phosphorus. In addition, opportunist fungi may be able to enhance access to these elements via physical and biochemical processes. Altogether, tephra deposition has the potential to affect biological activity and hence, nutrient cycling in the buried soil. Here we present the preliminary results of an ongoing investigation aimed at shedding light on the interaction of soil fungi with freshly deposited tephra. The study site (elevation - 1755 m a.s.l.) is a coniferous forest on the northeastern slope of Etna volcano, Sicily, which received about 20 cm of tephra in November 2013. Soil and tephra samples were collected in September 2014 and October 2015. A variety of biological, chemical and mineralogical analyses were carried out to determine fungal biomass, fungi species and tephra weathering stage. Colonisation of the fresh tephra by fungi is evidenced by the high fungal biomass measured in this material. DNA analyses further indicate that these fungi originate from the soil beneath the tephra layer. While chemical weathering of the tephra material has started, there is no clear indication that fungi colonisation is enhancing this process. We will continue to monitor fungi-tephra interaction on Etna during the next few years.