

**Assessment for applicability of microwave oven in rapid determination of moisture content in peat soil**

**ABSTRACT**

Peat soil has high water and organic content. The determination of peat soil moisture content using microwave oven method is an alternative to the convection oven-drying method. This result is an ideal for rapid moisture content determination. This study describes the applicability of microwave oven dried method in rapid determination of moisture content for peat soil and determined drying time. However, there is an interest regarding rapid drying time that applied to the organic soil such as peat. Klias peat classified as hemic peat with high organic content at 55.82%. This research observed the physical deformation of peat during drying process. Rapid drying process in peat soil leads crusting, overheating and specimens burnt where peat soil fibre and particles transformed to grey ashes. Peat risked to burn in microwave oven and perceived as unsafe practice for longer periods. Peat soils demanded for specific method to suit the physical properties of peat differ than the existing standard test procedure.