The fruits of Garcinia cambogia (G. cambogia) and Garcinia polygona (G. polygona) belonging to the family Combretaceae, also known as weight loss supplements, are effective in reducing body fat. The oil obtained from these fruits is rich in acetylshikimic acid, a potent agent in thermogenesis and fat oxidation. The present study focuses on the isolation and characterization of hydroxyapatite (HAP) from the oil of Garcinia polygona. The isolated HAP was characterized by X-ray diffraction (XRD), Fourier-transform infrared spectroscopy (FTIR), and Scanning Electron Microscopy (SEM) to understand its structural and morphological characteristics. The results indicate that the isolated HAP is of high purity and can be used as a potential candidate for bone tissue engineering.

Keywords: Hydroxyapatite, Bioactive ceramics.