The Ericaceae are dominant plants of acid heathland and upland soils including the genera Calluna, Erica, Vaccinium, Azalea, Rhododendron, and the Epacrids of Australasia which grow in dry sandy soils. Ericaceae are enabled to grow in acid and upland soils too poor in mineral nutrients for other plants, by forming ERM, mainly with Helotiales (ascomycetes). Masutani et al. noted in their study of grayanotoxin effects on frog skeletal muscle that grayanotoxin appears to contain four hydroxyl groups essential for its biological activity.