The essential oil content of leaves of *E. citriodora* from several locations in Kenya was 2.2-8.3%. The chief constituents of the oil were citronellal (65-88%) citronellol (2-25%) and isopulegol (2-19%). The presence of 2 chemical varieties of *E. citriodora* in Kenya is reported, the 1,8-cineole variety (containing 18.7% 1,8-cineole) and the citronellol variety (containing 32.1-51.8% citronellol). These varieties did not differ morphologically from the normal variety. The cultivation of *E. citriodora* in Kenya for both timber and essential oil production is recommended.