Supplementary Material

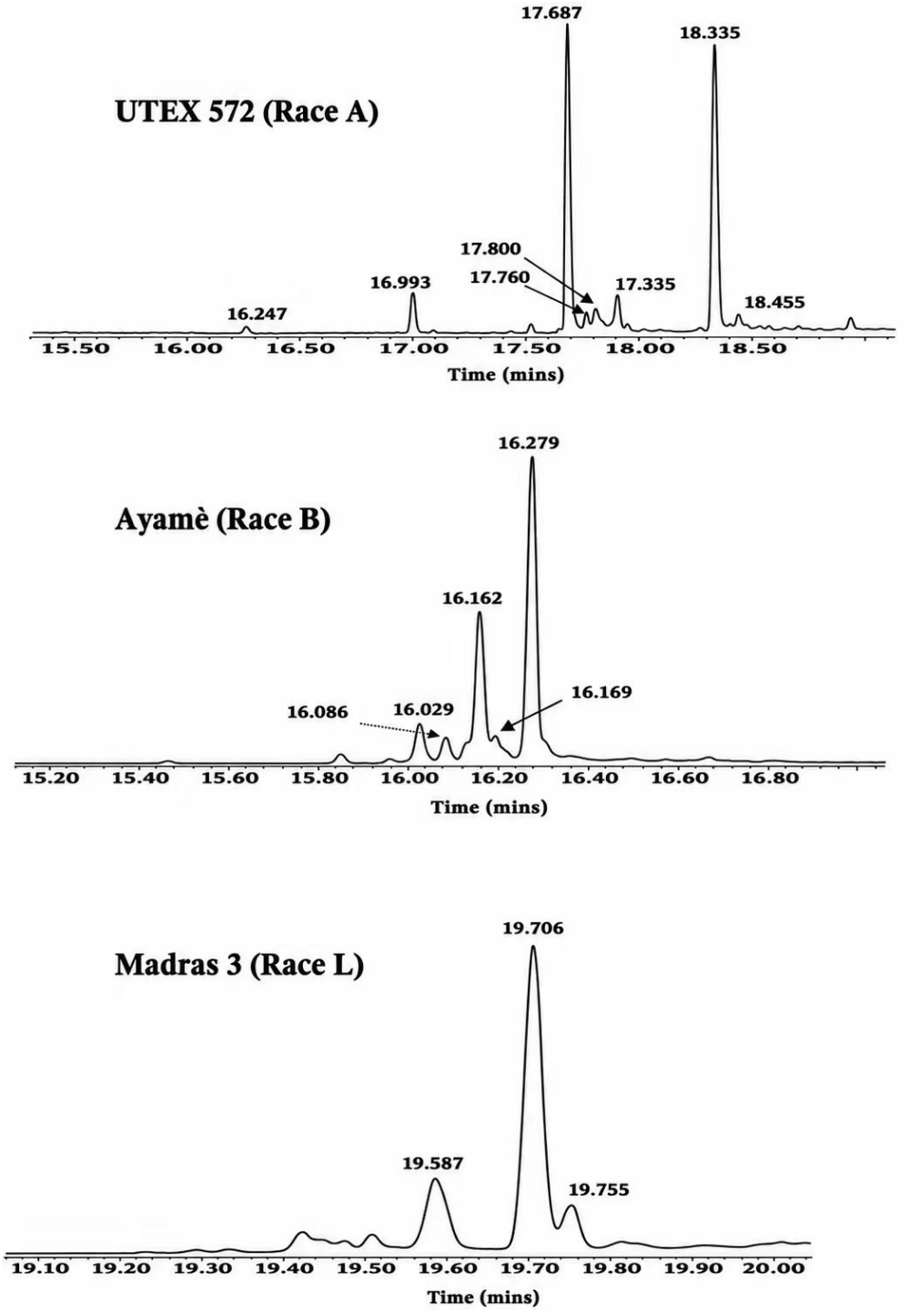


Figure S1. Representative gas chromatography-mass spectrometry (GC-MS) chromatograms of hydrocarbon extracts from three *Botryococcus braunii* chemical races: (**top**) UTEX 572 (Race A), displaying characteristic C_{25}–C_{31} fractions with primary peaks at retention times (R_t) of 17.687 min and 18.335 min; (**middle**) Ayamè (Race B), displaying C_{33}–C_{34} fractions dominated by the C_{34d} peak at R_t = 16.279 min; and (**bottom**) Madras 3 (Race L), displaying the C_{40} fraction dominated by the C_{40b} peak at R_t = 19.706 min. The chromatograms illustrate characteristic retention time separations and unique elution profiles among the evaluated strains under standardized analytical parameters.