

Fig. S1. Map of the sampling sites in Inner Mongolia, northern China

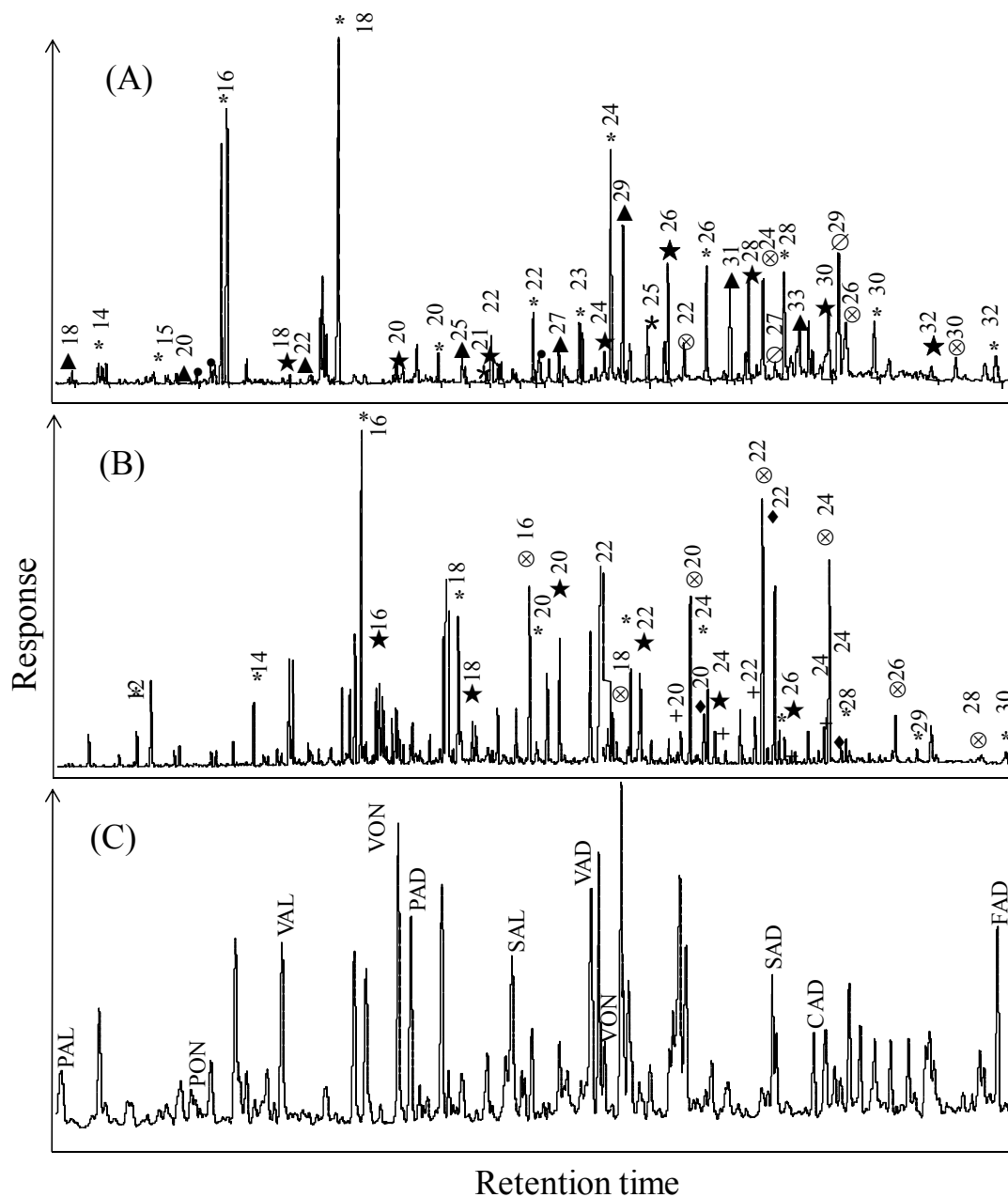


Fig. S2. Gas chromatograms of (A) solvent extractable fraction; (B) base hydrolysable fraction and (C) CuO oxidation products of grassland soils in Inner Mongolia, northern China. ▲: *n*-alkanes; ★: *n*-alkanols; *: *n*-fatty acids (FA); ⊗: ω-OH-FA; ∅: sterols; •: sugars; +: *n*-diacids (DA); ◆: α-OH-FA. Numbers refer to total carbon numbers in individual biomarkers. Pal: *p*-Hydroxybenzaldehyde; Pon: *p*-Hydroxyacetophenone; Pad: *p*-Hydroxybenzoic acid; Val: vanillin; Sal: syringaldehyde; Von: acetovanillone; Son: acetosyringone; Vad : vanillic acid; Sad: syringic acid; Cad: *p*-coumaric acid; Fad: ferulic acid.