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SUPPLEMENTARY

Effect of long-term grazing stress on the contents of phenolic compounds in Carex and Aster plants in Mongolia

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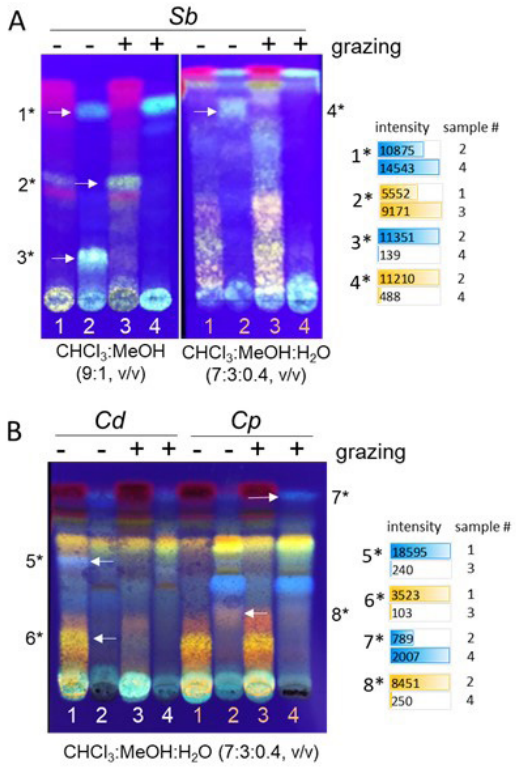

Fig.S1. Detections of phenolic compounds under grazing stress. Detections of phenolic acids and phenols in (A) *Sb-Stipa baicalensis* and (B) *Carex duriuscula (Cd)* and *Carex pediformis (Cp)* plants were performed with TLC chromatogram using NP/PEG reagent under 366 nm. Mobile phases were used as shown in the lover panel of the chromatograms. (1 and 3) and (2 and 4) numbers in the lover panels correspond to the above-ground part and root samples; (-) and (+) symbols correspond to without and with grazing conditions, respectively. The selected interesting bands were marked with asterisks (*) on the chromatogram. The samples were spotted on TLC plates with the same numbers. The band intensities in the samples were estimated using Image J from the chromatograms.

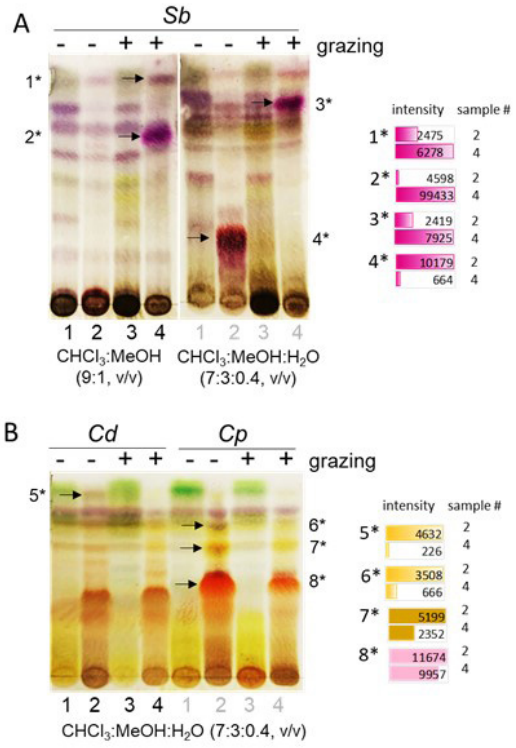

Fig.S2. Comparative TLC of metabolites under grazing stress. General detection assays of multiple metabolites in (A) *Sb-Stipa baicalensis* and (B) *Carex duriuscula (Cd)* and *Carex pediformis (Cp)* plants were performed with TLC chromatogram vanilin-sulphuric acid reagent. Mobile phases were used as shown in the lover panel of the chromatograms. (1 and 3) and (2 and 4) numbers in the lover panels correspond to the above-ground part and root samples; (-) and (+) symbols correspond to without and with grazing conditions, respectively. The selected interesting bands were marked with asterisks (*) on the chromatogram. The samples were spotted on TLC plates with the same numbers. The band intensities in the samples were estimated using Image J from the chromatograms.