



Figure 6 Principal component analysis (PCA) for the relationship for all the plant characters and soil properties under different treatments. The length of a variable vector in the representation space is indicative of the variable's level of contribution. STC, soil total carbon; STN, soil total nitrogen; STP, soil total phosphorus; STS, soil total Sulphur; STK, soil total potassium; soil Ca, soil calcium; soil Mg, soil magnesium; plant N, plant nitrogen; SAK, soil available potassium; SAP, soil available phosphorus, NO_3^- , nitrate nitrogen; NH_4^+ , ammonium nitrogen; P_n , net photosynthetic rate; R_s , respiration rate; GD, grass dominance; SD, sedge dominance; FD, forb dominance; AGB, total aboveground biomass; UG, ungrazed; OG, overgrazing; OG×N, overgrazing with N deposition.