

## Supplementary Text S2. Translocation factor (TF)

The translocation factor (TF) expresses the extent of PFAS transport from root to shoots via xylem and the transpiration stream [47]. PFAS TF values between the bulb and shoot exceeded 1 for most compounds across all treatments, except PFHxS (0.9), PFOS (0.7), PFTeA (0.25), and PFSOA (0.9) (**Supplementary Fig. S6**). The literature reports that TF values decrease with increasing PFAS chain length, whereas the longer-chain PFASs are preferentially retained in the roots [47]. Cucumber sprouts showed a significant translocation of long chain analytes like PFOA and PFOS as compared to short chain analytes during 21 days of exposure in contaminated soil [7]. The translocation of PFAS from root to shoots has been demonstrated in several plant species, including perennial species such as silver birch (*Betula pendula*), Norway spruce (*Picea abies*), bird cherry (*Prunus padus*), mountain ash (*Sorbus aucuparia*), ground elder (*Aegopodium podagraria*), and annuals such as vegetables and grain crops [9,48,49]. For example, PFAS concentrations in birch and spruce were highest in leaves, followed by branches and root tissue [9], while PFAS TF values in narrow-leaved cattail (*Typha angustifolia*) were greater than 1 for short-chain analytes but less than 1 for longer-chain PFASs [50]. In the current study, the sorbent amendments did not result in a definitive trend change in PFAS translocation, although both the sorbents appear to facilitate long-chain PFAS translocation from the shoot to the bulb. This occurrence might be attributed to the influence of BC on soil properties or water transpiration in the plant [51].