**Molecular Mechanism of Flowering under Stress Environment**

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The timing of flowering in stress environments is critical for plants to secure reproductive success. We reveal that SOS3, a regulatory component of the Salt Overly Sensitive (SOS) pathway for salt adaptation, makes a complex with the photoperiodic flowering components GIGANTEA (GI) and FKF1 (FLAVIN BINDING, KELCH REPEAT, F-BOX1) to ensure the expression of the flowering activator *CONSTANS* (C*O*) under salt stress. Palmitoylation-dependent nuclear import of SOS3 selectively stabilizes GI in the nucleus to proceed with flowering while degradation of GI in the cytosol releases the protein kinase SOS2 to achieve salt tolerance. Thus, SOS3 is a Ca2+ and palmitoylation dependent molecular switch required to ensure flowering in a saline environment. The spatial segregation and controlled stability of GI and SOS3 proteins explain the environmentally regulated outputs of their signaling networks in stress adaptation and time of flowering.

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2. Cha et al. (2015). A novel thiol-reductase activity of Arabidopsis YUC6 confers drought tolerance independently of auxin biosynthesis. ***Nature Communications***, 6: 8041.
3. Park et al. (2017). A calcium/palmitoylation switch interfaces the signaling networks of stress response and transition to flowering. ***Nature Communications*** conditional acceptance (NCOMMS-17-10412A).