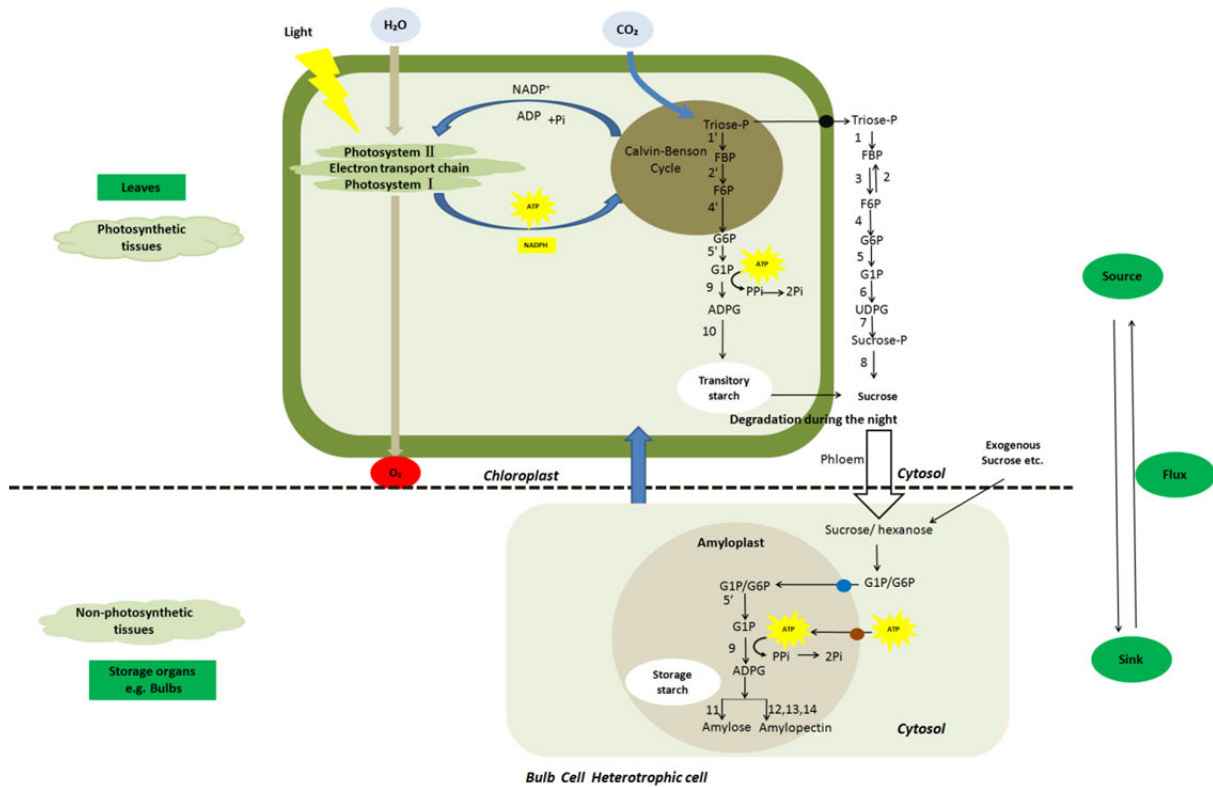


# Low humic acids promote in vitro lily bulblet enlargement by enhancing roots growth and carbohydrate metabolism

## Supplementary material



**Fig. S1 Classic interpretation of source-sink-conversion pathway in in-vitro bulblet (adapted from Bahaji *et al.*, 2014)**  
 The enzymes are numbered as follows: 1,1', fructose-1,6-bisphosphate aldolase (EC 4.1.2.13); 2,2' fructose 1,6-bisphosphatase (EC 3.1.3.11); 3, 6-phosphofructokinase1 (EC 2.7.1.11); 4,4', plastidial phosphoglucose isomerase (EC 5.3.1.9); 5,5', plastidial phosphoglucomutase (EC 5.4.2.2); 6, uridine diphosphate glucose pyrophosphorylase (EC 2.7.7.9); 7, sucrose-phosphate-synthase (EC 2.4.1.14); 8, sucrose phosphate phosphatase (EC 3.1.3.24); 9, adenosine 5'diphosphate glucose pyrophosphorylase (EC 2.7.7.27); 10, starch synthase (EC 2.4.1.21); 11, soluble starch synthase (EC 2.4.1.21); 12, granule-bound starch synthase (EC 2.4.1.21); 13, starch branching enzyme (EC 2.4.1.18); 14, starch debranching enzyme (EC 3.2.1.10). The different colour of solid cylinder means different membrane transporters