

## Preliminary Results: Average Stormwater Runoff from Green Wall Systems at SIUE

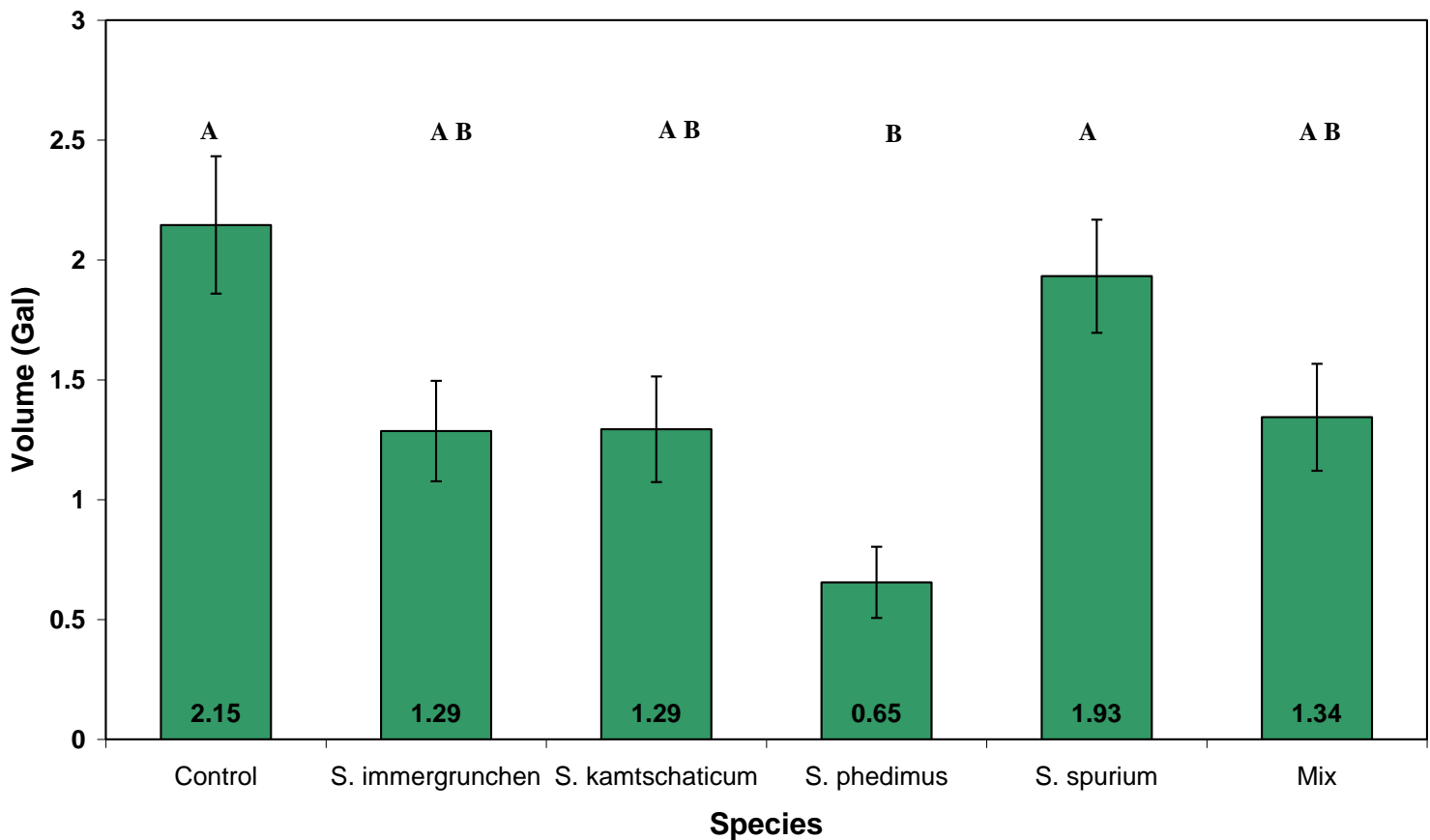


Figure 1. Mean storm water runoff volume (gal) for study period 7/2010-9/2010 for green wall systems planted with four single-species treatments (*Sedum immergrunchen*, *S. kamtschaticum*, *S. phedimus*, and *S. spurium*), a mixed *Sedum* treatment, and an unplanted control. n=3. Bars with same letter not significantly different for p<0.05 level. Error bars  $\pm$  1 se.

This figure illustrates results from an evaluation of green landscaping wall systems located on the campus of SIUE. Results so far indicate that, on average, walls planted with *Sedum spurium* have the same storm water runoff as walls without any vegetation. Further, walls planted with *S. phedimus* have significantly less storm water runoff than walls planted with *S. spurium* and walls without any vegetation. Finally, storm water runoff volumes from walls planted with *S. immergrunchen*, *S. kamtschaticum*, and mixed *Sedums* are also not different from one another and not different from the runoff volume of walls without any vegetation.

Results only reflect data collected from July through September 2010. Data collection is ongoing to determine any other runoff volume differences. The results used in this analysis also include multiple measurements for some rain events; averages were calculated using the total number of measurements, not rain events. Also, collection units sometimes reached capacity during substantial rain events.