



**Figure 2. GC viability in different stomatal opening buffer and leaf starch amounts under short day and neutral day. Percentage of intact guard cells (GC) for GC-enriched epidermal fragments from *Arabidopsis* grown under neutral day (ND; 12 h light / 12 h dark; a, b) or short day (SD; 8 h light / 16 h dark; c, d) conditions. For mock treatment, fragments were isolated, incubated for 30 min in MES-BTP (a, c) or NaOH buffer (b, d) in the dark, after which the blue light (BL) experiment was conducted. For mannitol treatment, fragments were stored in 0.5 M mannitol for 30 min in the dark, washed with 1 L of water, and transferred to the indicated buffer before BL exposure for 1 hour. Samples for the live/dead staining were collected after BL exposure and stained immediately. Representative images show intact guard cells in green and non-intact guard cells in red. Data represent  $n$  independent stomata per condition. Significant differences between mock and mannitol treatments were assessed using a Wilcoxon test (\*,  $p < 0.05$ ; \*\*,  $p < 0.01$ ; \*\*\*,  $p < 0.001$ ; ns, not significant). In e), an enzymatic assay was used to quantify the starch from whole leaves in ND- and SD-grown plants, for which a Wilcoxon test assessed significant differences in leaf starch content.**