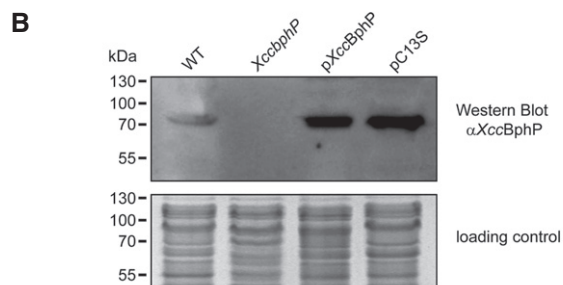
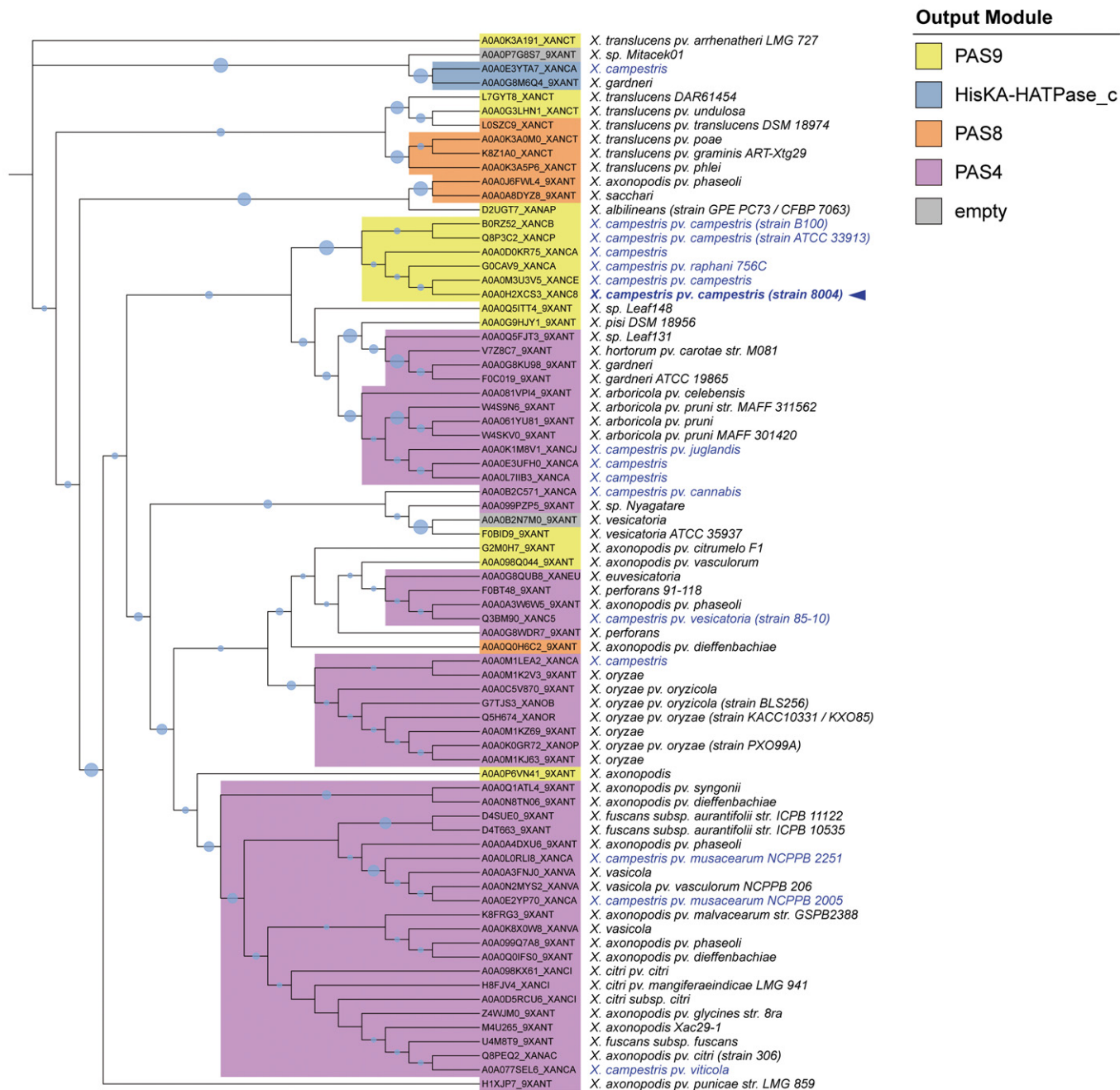


## Expanded View Figures



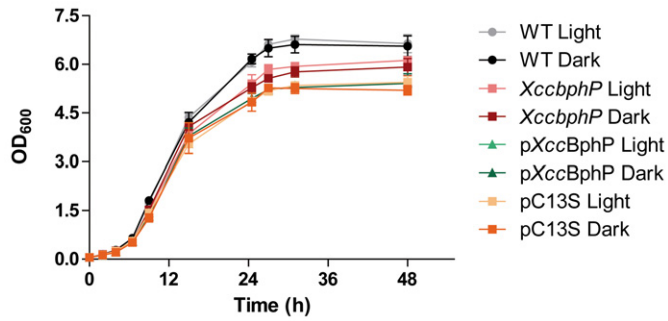
**Figure EV1. Generation of the *XccbphP* mutant and detection of XccBphP.**

- A XC\_4241 ORF was partially deleted and replaced by a 2 kb  $Sm^r$ / $Spc^r$  cassette ( $\Omega$ ) through allelic exchange giving rise to the *XccbphP* null-mutant strain.
- B A Western blot was performed using mouse polyclonal antibodies against XccBphP in wild-type, *XccbphP*, pXccBphP, and pC13S strains. Loading control SDS-PAGE stained with Coomassie blue is shown in the bottom panel.



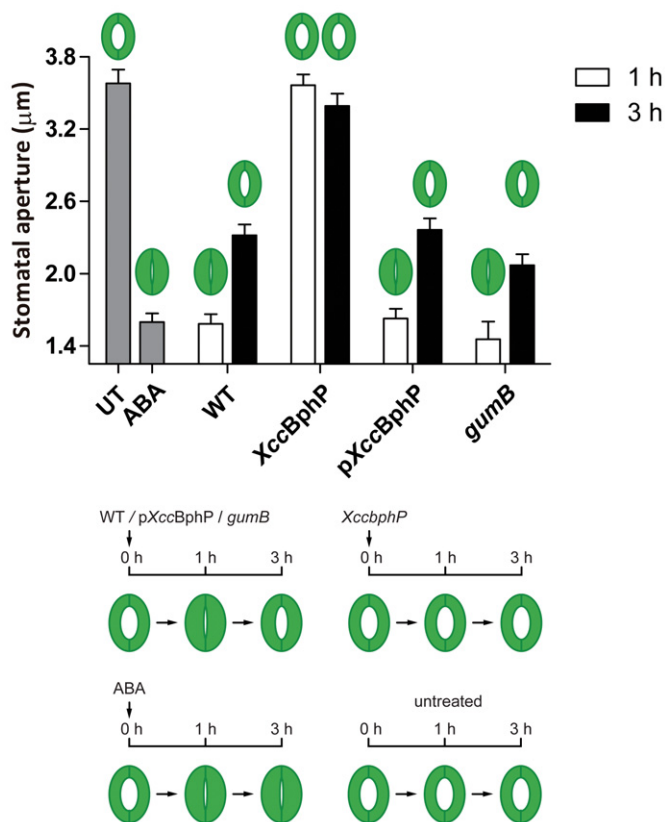
**Figure EV2. Phylogenetic tree of BpHPs from the Xanthomonas genus.**

75 BpHP sequences from UniProtKB database were identified in the *Xanthomonas* genus bearing a PAS2-GAF-PHY photosensory module. A molecular phylogenetic analysis by maximum-likelihood method was performed using the respective PHY domain sequences. Species, strains, and UniProtKB accession numbers are indicated. *Xanthomonas campestris* species are indicated in blue letters, and the strain 8004 used in this work in bold letters and an arrow. Relative bootstrap values are represented by blue bubble sizes. The output module domains identified in Pfam database are depicted in colors that correspond to single PAS4, PAS8, PAS9 domains, and HisKA coupled with a HATPase\_c domain. BpHPs that showed no output module domains are indicated in gray (empty).



**Figure EV3. Wild-type, *XccbphP*, *pXccbphP*, and *pC13S* growth curves.**

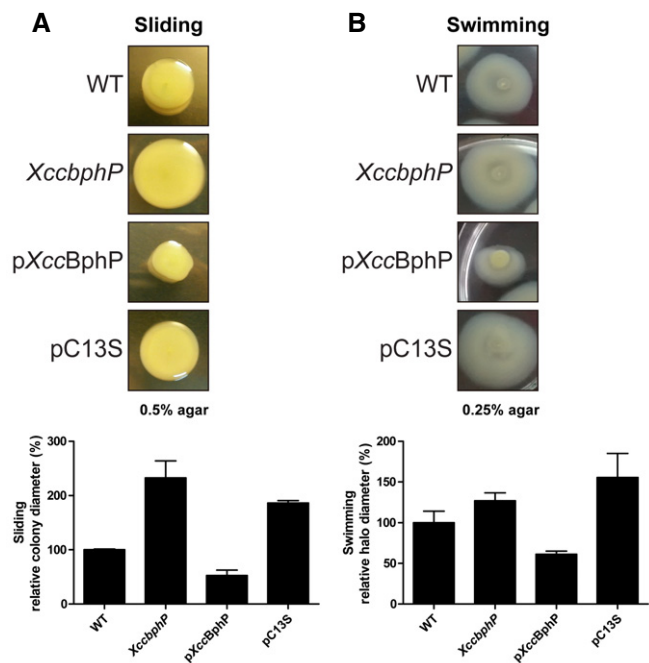
Wild-type, *XccbphP*, *pXccbphP* and *pC13S* strains were cultured in PYM liquid medium under light or dark conditions (starting  $OD_{600} = 0.05$ ) at 28°C and 250 rpm.



**Figure EV4. Induced stomatal closure bioassay.**

Promotion of stomatal closure induced by wild-type, *XccbphP*, *pXccbBphP*, and *gumB* bacterial strains.

Stomatal apertures measurements recorded after 1 or 3 h.p.i.; UT: untreated (no bacterial treatment), ABA: abscisic acid. Bottom panel: Experimental design and results scheme: light-irradiated stomata (opened) are treated for 1 or 3 h with the bacteria in light conditions. Values are expressed as mean  $\pm$  s.e.m. ( $n = 80$  replicates). Data are representative of two independent experiments.

**Figure EV5. Sliding and swimming motilities modulated by *XccBphP*.**

A, B Three microlitres from wild-type, *XccbphP*, p*XccBphP*, and pC13S bacterial cultures ( $OD_{600} = 1$ ) were plated onto PYM-glucose 0.5% (A) or NYGB 0.25% (B) agar plates. (A) Sliding motility was assessed by measuring colony diameters, and (B) swimming motility was assessed by measuring external halo diameters. Bottom panels show quantifications as mean  $\pm$  s.e.m. ( $N = 4$ ).