**Figure S1.** The overview of experimental design. Whole-plant corns or Napier grasses were freshly collected for ensiling. The treatment groups were a non-inoculated control group (Control), and the groups inoculated with following starter inocula, *Lactobacillus plantarum* J39 (T1), *L. brevis* BCC42336 (T2), *Pediococcus pentosaceus* TBRC7603(T3), and a combination of *L. plantarum* J39, *L. brevis* BCC42336 and *P. pentosaceus* TBRC7603 (T4). Silage was sampling in triplicates and pooled together on day 0, day 3 and day 7 of ensiling for chemical and microbiota analyses.

