Fig.S1. Outline of the rooting experiment.

32 Genotypes: 2 parental clones + 30 F_1 full-sib genotypes

Cuttings rooting in trays (five cuttings per tray), 4 trays for each genotype (128 trays)

The trays were arranged in two blocks

Final destructive sampling after 35 days

Fig.S2. Detail of cuttings with roots and with callus in the rooting experiment.

A. Cutting with roots.

B. Cutting with callus.

Fig.S3. Outline of the flooding experiment.

Populus deltoides plants growing in pots → Flooding treatment (35 days) → Final destructive sampling

<u>31 genotypes:</u>
2 parental clones + 29 F_1 full-sib genotypes

<u>2 treatments</u>: control (well drained) and flooded 10 cm above soil level.

6 repetitions for each genotype and treatment: 372 plants

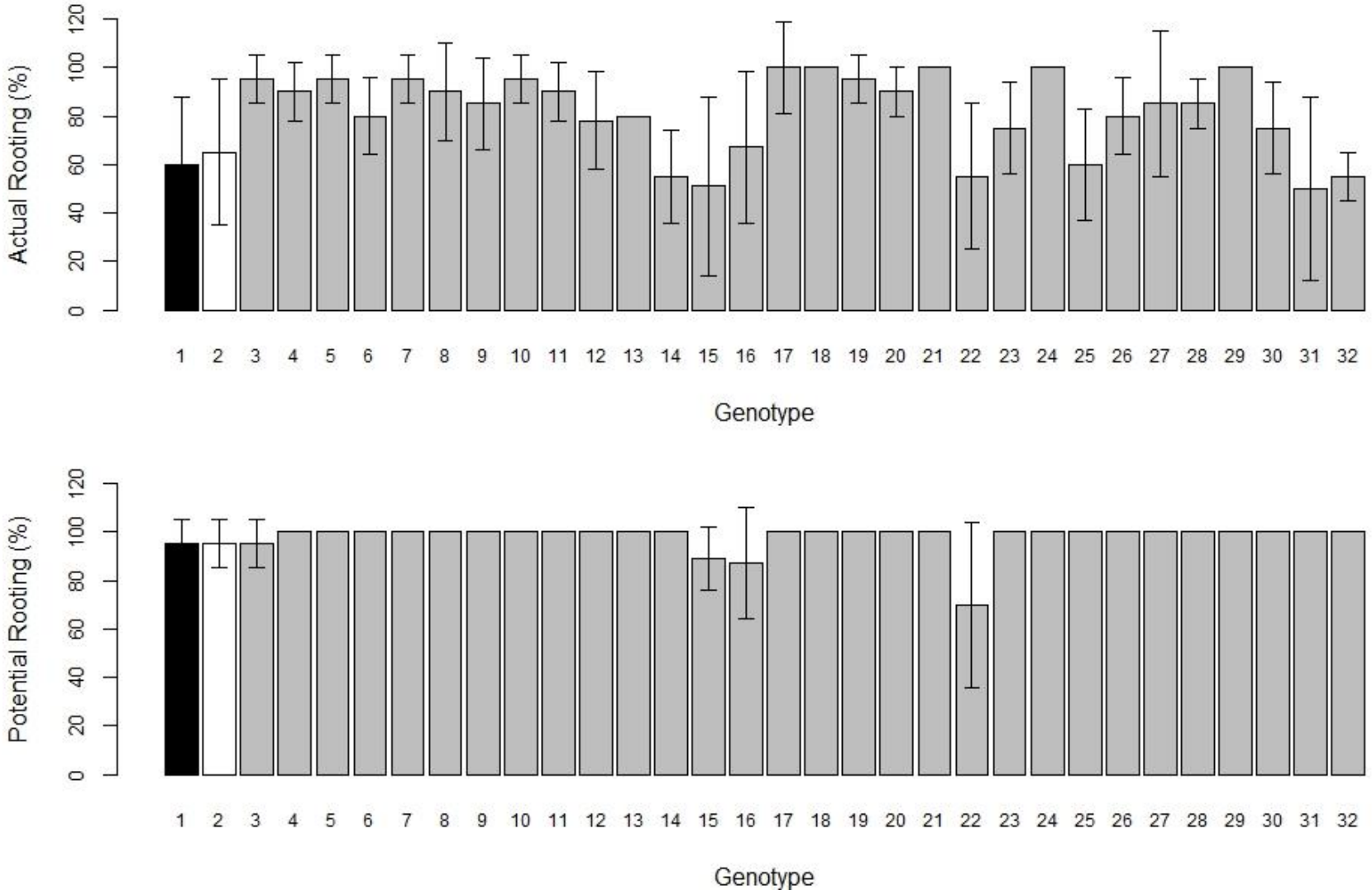

Fig.S4. Actual rooting percentage and potential rooting percentage for the parental clones and 30 full-sib genotypes of the F_1. Black: clone CAR. White: clone Nandi. Grey: F_1. Vertical bars: $\pm$ one standard deviation.

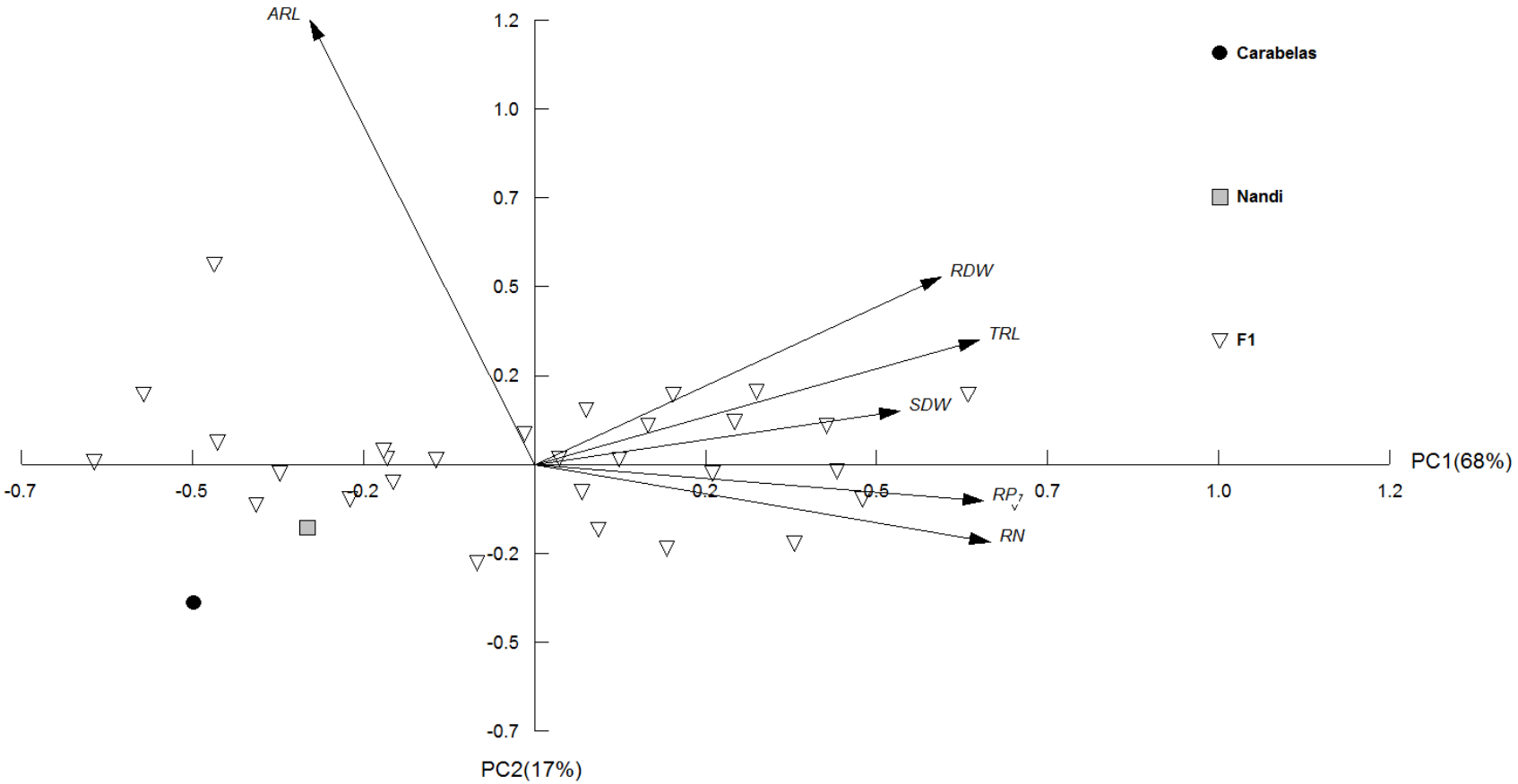

Fig.S5. Principal component analysis of the rooting experiment. The analysis was done with the clonal means, and the data were standardized and centered.

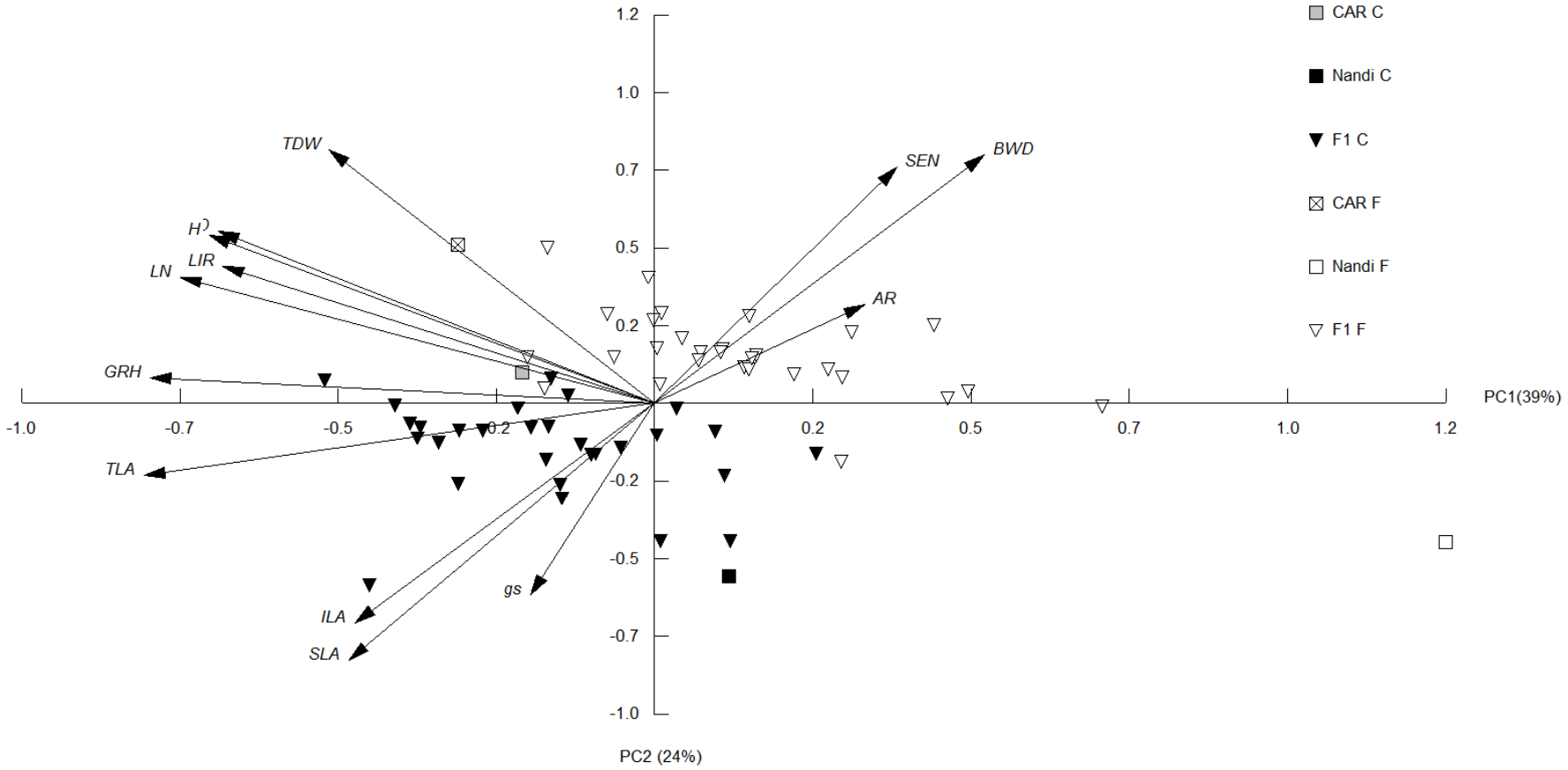

Fig.S6. Principal component analysis of the flooding experiment. The analysis was done with the clonal means, and the data were standardized and centered. C: control. F: flooded.