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Classification of Korean local corn lines by the taxonomic distance based on principal component analysis

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Korean local corn lines collected from Busan and Gyungnam Province were classified by the principal component analysis method. The lines were classified into 4 lineal groups by the taxonomic distance. Group I included 11 lines, and group II, group III and group IV included 20 lines, 14 lines and 4 lines, respectively.

Four groups could be characterized as follows: Group I: early maturity, short height plant, small ears, small kernels, low tillering and medium yielding. Group II: early maturity, tall plant, large ears, large kernels, multi-ears, low tillering, high yielding. Group III: late maturity, short height plant, small ears, small kernels, high tillering and low yielding. Group IV: medium maturity, tall plant, large ears, small kernels, prolific ears, high tillering and higher yielding.