Procedures for the PCA analysis of flax sample data

There are eight steps involved from the input data *Clean_SNP_Genotypes.txt* to output data PCA plot *Step8.jpg*

Step 1: Input *Clean_SNP_Genotypes.txt* into Excel file, add "locus" column, and fill series numbers into the column.
Step 2: Delete three columns of CHROM, POS, and REF in Excel and transpose rows and columns.
Step 3: Generate two column data using perl script *Perl-script-for-Step3.pl*.
Step 4: Re-code numerically in Excel (A=1, C=2, G=3, T=4).
Step 5: Add population information and change sample labels in Excel
Step 6: Use GenAlEx to change the format
Step 7: Use GenAlEx to perform PCA analysis
Step 8: Output PCA plot