

Supplementary Figures

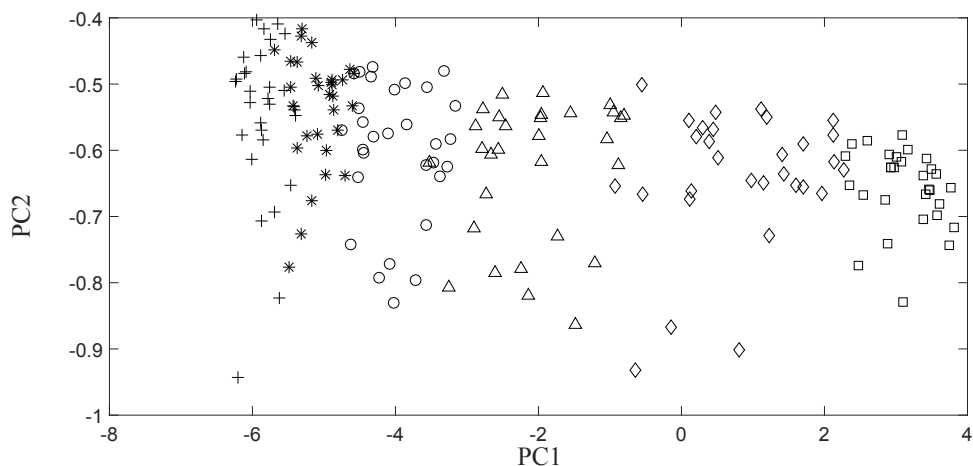


Fig.1s. The PCA score plots of the adulterated BD kudzu root groups based on preprocessed FTIR spectra data(+ represents BD, * represents 2%, o represents 5 %, Δ represents 10 %, ◇ represents 30%, □ represents 50%)

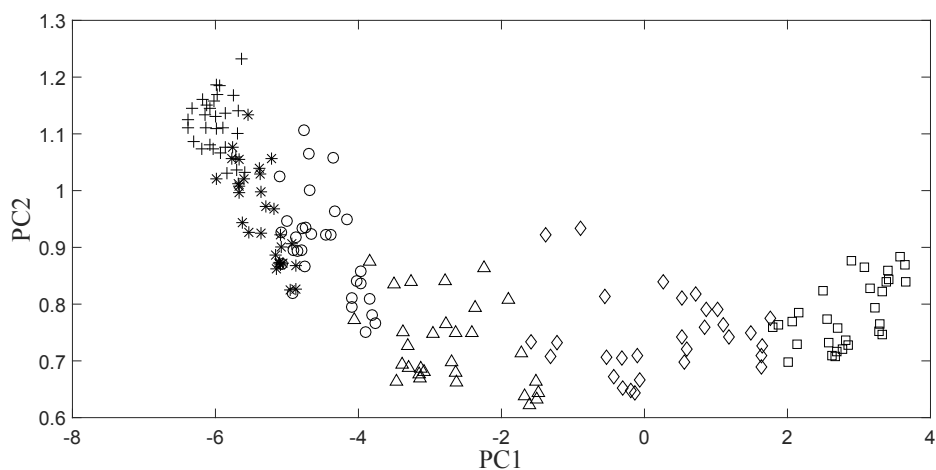


Fig.2s. The PCA score plots of the adulterated DHS kudzu root groups based on preprocessed FTIR spectra data(+ represents DHS, * represents 2%, o represents 5 %, Δ represents 10 %, ◇ represents 30%, □ represents 50%)

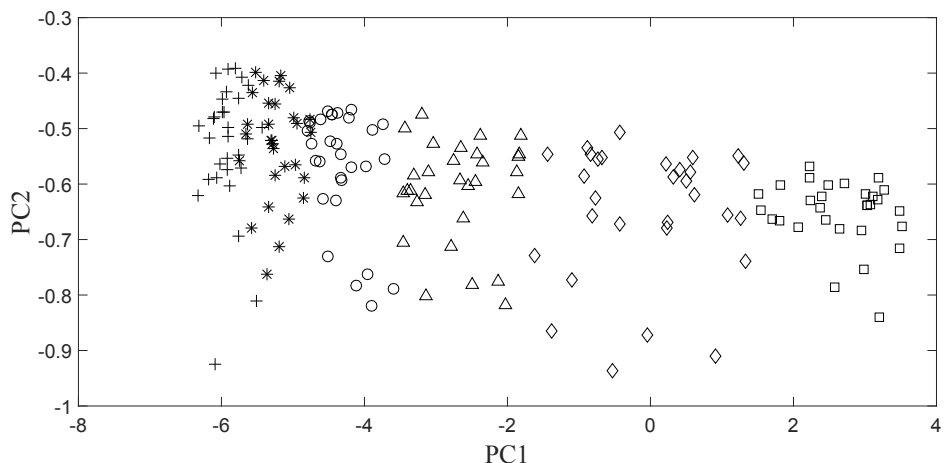


Fig.3s. The PCA score plots of the adulterated AQ kudzu root groups based on preprocessed FTIR spectra data(+ represents AQ, * represents 2%, o represents 5 %, Δ represents 10 %, ◇ represents 30%, □ represents 50%)

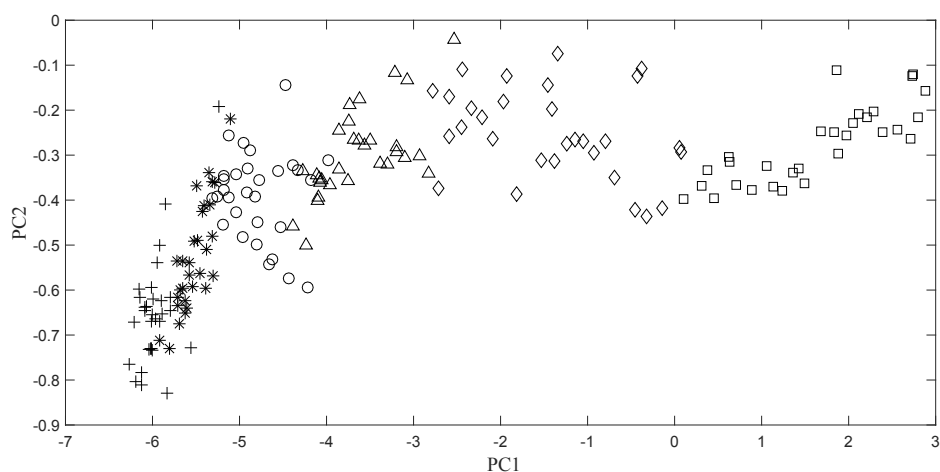


Fig.4s. The PCA score plots of the adulterated ZX kudzu root groups based on preprocessed FTIR spectra data(+ represents ZX, * represents 2%, o represents 5 %, Δ represents 10 %, ◇ represents 30%, □ represents 50%)

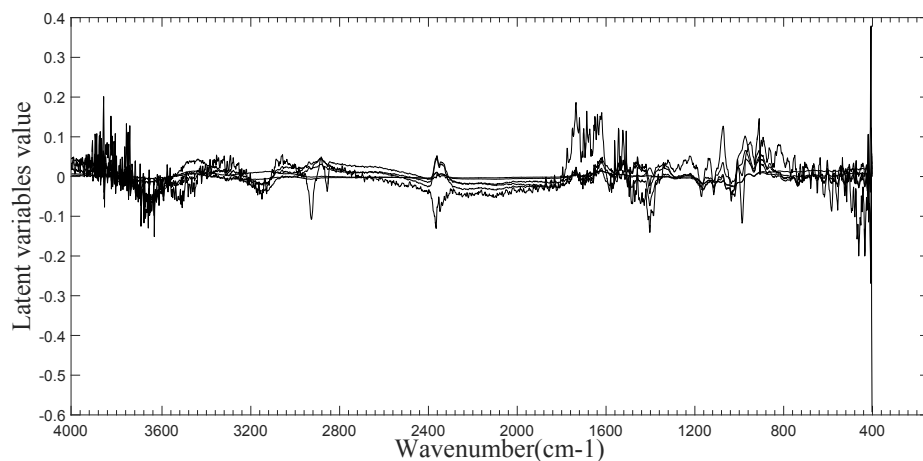


Fig.5s. The loading vectors for the latent variables from the PLS-DA analysis (geographical origin model)

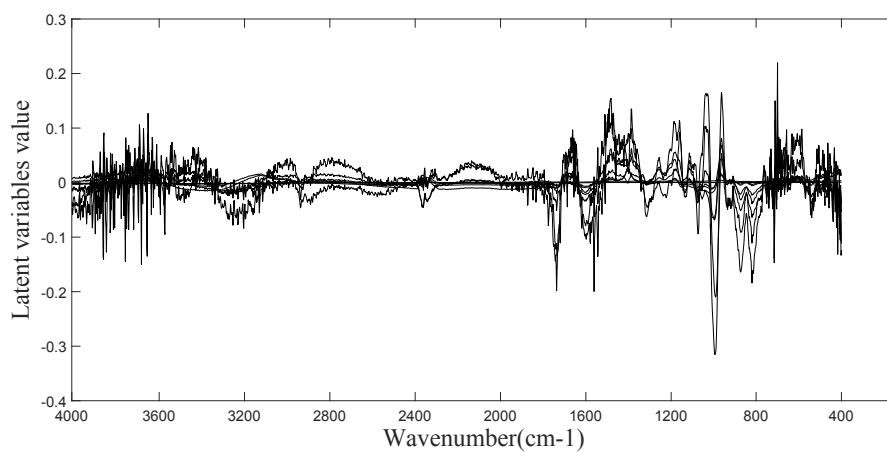


Fig.6s. The loading vectors for the latent variables from the PLS-DA analysis (authentication model for adulterated ZJJ kudzu root samples)

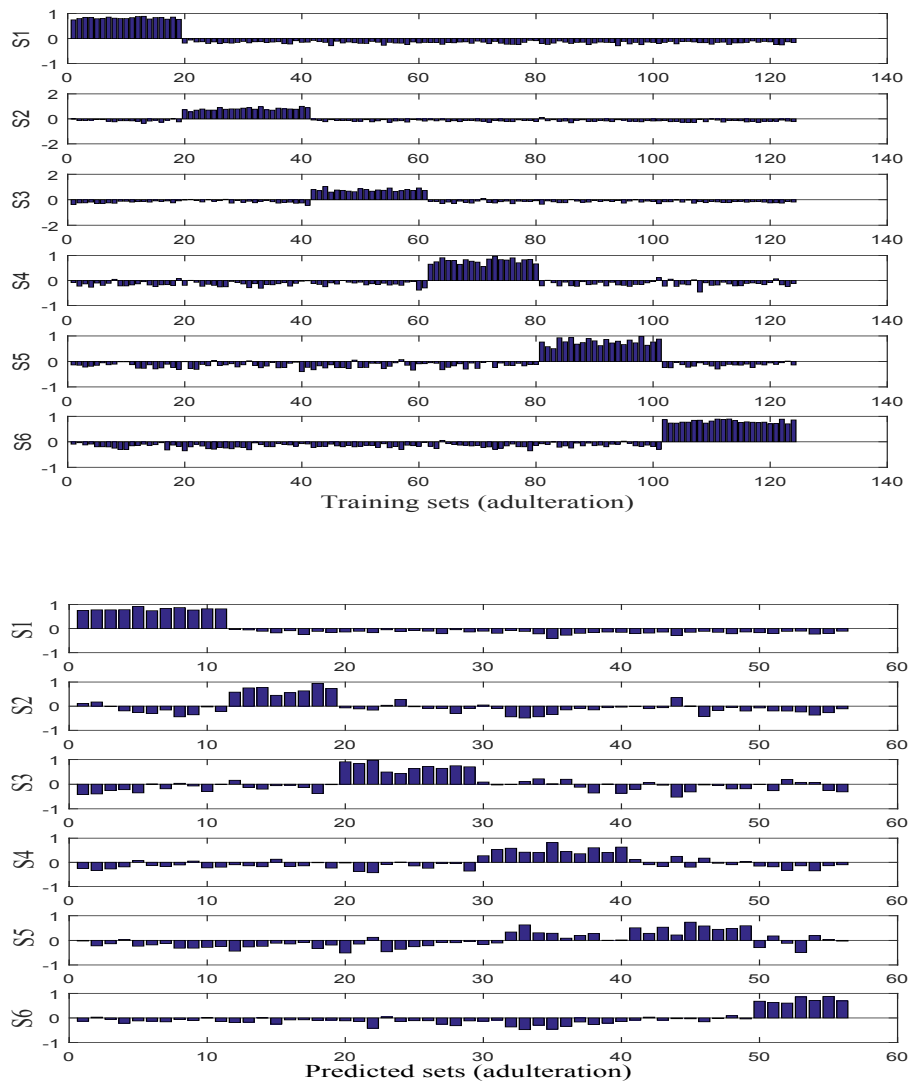


Fig.7s.The estimated dummy vectors by PLS-DA (authentication model)refer to the variety memberships of the samples in the training set and the prediction set (S1, S2, S3, S4, S5 and S6 represent BD, 2%,5%, 10%, 30% and 50% adulterated BD kudzu root samples, respectively).

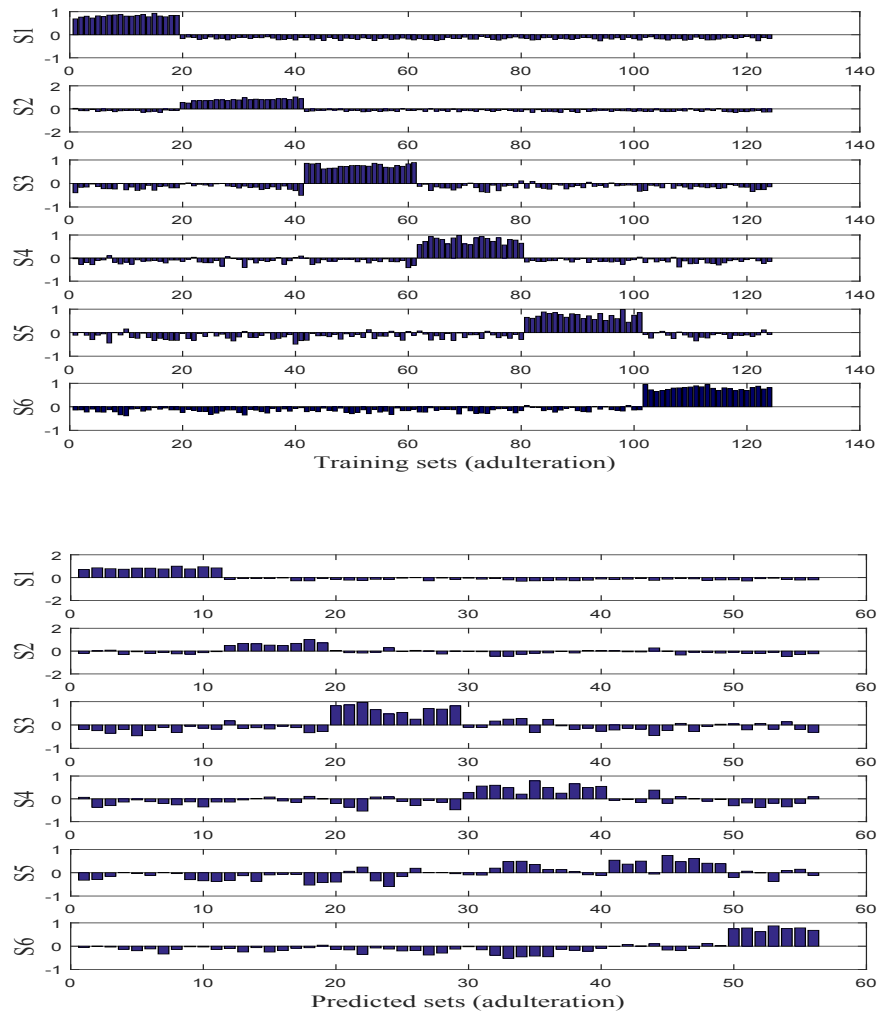


Fig.8s.The estimated dummy vectors by PLS-DA (authentication model)refer to the variety memberships of the samples in the training set and the prediction set (S1, S2, S3, S4, S5 and S6 represent DHS, 2%,5%, 10%, 30% and 50% adulterated DHS kudzu root samples, respectively).

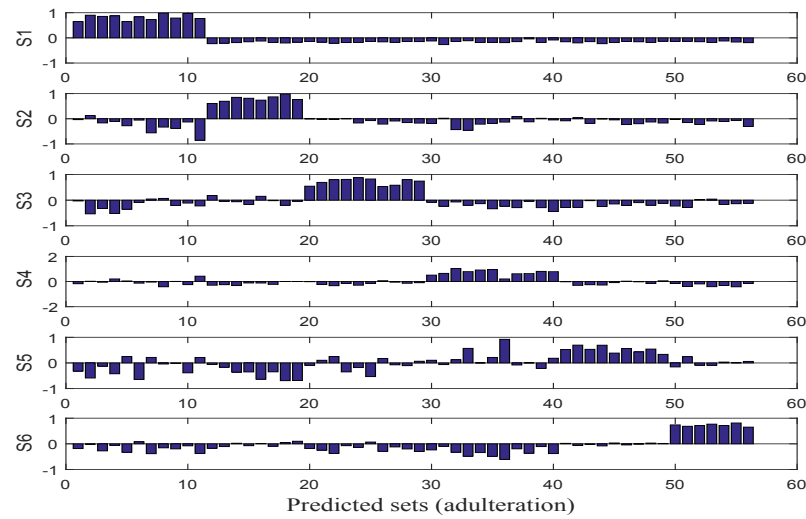
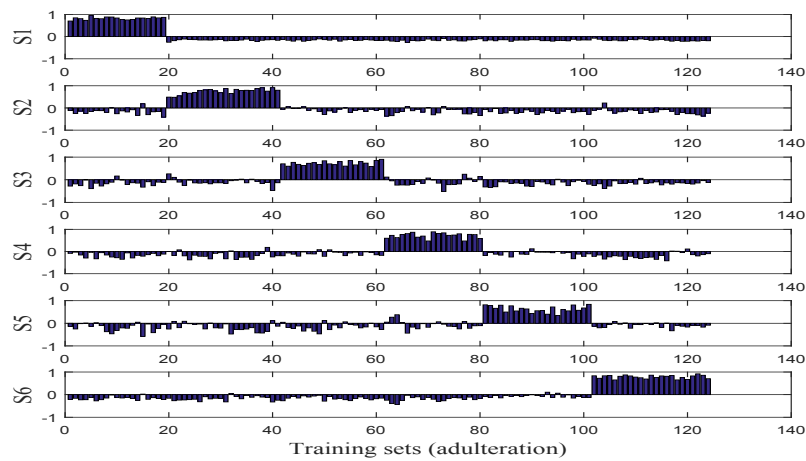


Fig.9s.The estimated dummy vectors by PLS-DA (authentication model)refer to the variety memberships of the samples in the training set and the prediction set (S1, S2, S3, S4, S5 and S6represent AQ, 2%,5%, 10%, 30% and 50% adulterated AQ kudzu root samples, respectively).

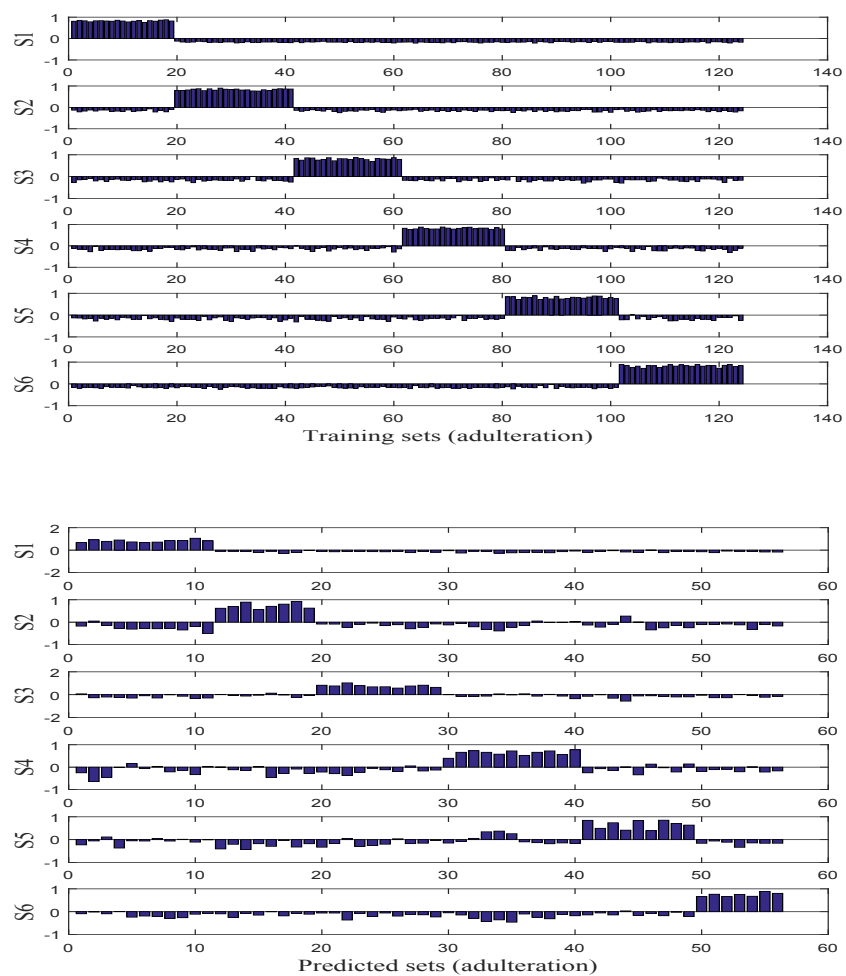


Fig.10s. The estimated dummy vectors by PLS-DA (authentication model) refer to the variety memberships of the samples in the training set and the prediction set (S1, S2, S3, S4, S5 and S6 represent ZX, 2%, 5%, 10%, 30% and 50% adulterated ZX kudzu root samples, respectively).