Supplementary Information

Quantitative analysis of blended Asian lacquers using ToF-SIMS, Py-GC/MS and HPLC

Hye Hyun Yu^{1,2}, Jung-Ah Lim³, Seung Wook Ham², Kang-Bong Lee⁴, and Yeonhee Lee^{1*}

¹Advanced Analysis Center, Korea Institute of Science and Technology, Seoul 02792, Korea ²Department of Chemistry, Chung-Ang University, Seoul 06974, Korea

³Post-Silicon Semiconductor Institute, Korea Institute of Science and Technology, Seoul

02792, Korea

⁴National Agenda Research Division, Korea Institute of Science and Technology, Seoul

02792, Korea

*Corresponding author; E-mail: yhlee@kist.re.kr, Tel: +82-2-958-5971, FAX: +82-2-958-

5969



Fig. S1. Positive-ion ToF–SIMS spectrum of Japanese *T. vernififluum* lacquer film in the mass range m/z = 0-720.



Fig. S2. Positive-ion ToF–SIMS spectrum of Vietnamese *T. succedaneum* lacquer film in the mass range m/z = 0-720.



Fig. S3. Positive-ion ToF–SIMS spectra of unknown lacquer films A and B in the following mass ranges: (a) m/z = 300-370 and (b) m/z = 600-700.



Fig. S4. Py-GC/MS total ion chromatograms of unknown lacquers A and B.



Fig. S5. HPLC Chromatograms of unknown lacquers A and B based on a) 3-pentadecatrienyl catechol and (b) 3-heptadecyl catechol.