

TABLE CAPTIONS

SUPPLEMENTAL DATA

SOLUTION OF PRINCIPAL COMPONENT ANALYSIS

TABLE 1.—Input correlation matrix of nine variables with unity in the principal diagonal. Data set includes the following sample types: (1) fossilized-cuticle and (2) cuticle.

TABLE 2.—Solution of PCA.

TABLE 3.—Acceptable two-component solution of PCA.

	CH ₂ /CH ₃	CHal/Ox	C=O/C=C	C=O cont	C=C cont	CHal/C=C	A Factor	C Factor	CHal/C=O
CH ₂ /CH ₃	1	0.250	-0.111	-0.129	-0.037	-0.048	0.072	-0.019	0.378
CHal/Ox	0.250	1	0.649	0.744	-0.579	0.695	0.719	0.652	-0.015
C=O/C=C	-0.111	0.649	1	0.826	-0.863	0.990	0.879	0.907	-0.506
C=O cont	-0.129	0.744	0.826	1	-0.689	0.785	0.738	0.815	-0.666
C=C cont	-0.037	-0.579	-0.863	-0.689	1	-0.863	-0.974	-0.973	0.414
CHal/C=C	-0.048	0.695	0.990	0.785	-0.863	1	0.893	0.898	-0.403
A Factor	0.072	0.719	0.879	0.738	-0.974	0.893	1	0.972	-0.324
C Factor	-0.019	0.652	0.907	0.815	-0.973	0.898	0.972	1	-0.521
CHal/C=O	0.378	-0.015	-0.506	-0.666	0.414	-0.403	-0.324	-0.521	1

	PC 1	PC 2	PC 3	PC 4	PC 5	PC 6	PC 7	PC 8	PC 9
CH ₂ /CH ₃	0.038	-0.848	0.521	0.031	-0.089	0.002	-0.004	0.001	0.000
CHal/Ox	-0.738	-0.461	-0.173	-0.450	0.094	-0.021	0.034	-0.011	0.008
C=O/C=C	-0.960	0.067	-0.081	0.039	-0.254	0.029	-0.012	0.006	0.021
C=O cont	-0.888	0.165	0.119	-0.404	0.055	0.045	-0.029	0.014	-0.012
C=C cont	0.928	0.074	-0.020	-0.332	-0.135	-0.053	-0.045	0.001	0.003
CHal/C=C	-0.951	-0.038	-0.134	0.053	-0.268	-0.029	0.014	-0.006	-0.019
A Factor	-0.951	-0.176	-0.067	0.194	0.137	-0.011	-0.048	-0.033	0.000
C Factor	-0.976	0.001	0.049	0.157	0.124	-0.052	-0.007	0.038	0.003
CHal/C=O	0.038	-0.848	0.521	0.031	-0.089	0.002	-0.004	0.001	0.000
Eigenvalue	6.151	1.500	0.567	0.550	0.209	0.010	0.007	0.003	0.001
Cumulative explained variance %	68.347	85.018	91.322	97.436	99.757	99.872	99.952	99.988	100

	PC 1	PC 2	Variance*
CH ₂ /CH ₃	0.038	-0.848	72.00
CHal/Ox	-0.738	-0.461	75.66
C=O/C=C	-0.960	0.067	92.59
C=O cont	-0.888	0.165	81.65
C=C cont	0.928	0.074	86.60
CHal/C=C	-0.951	-0.038	90.59
A Factor	-0.951	-0.176	93.55
C Factor	-0.976	0.001	95.31
CHal/C=O	0.522	-0.707	77.22
Eigenvalue	6.151	1.500	7.652
Cumulative			
explained	68.347	85.018	
variance %			

* Variance explained by first 2 PC (%).