Supplementary Material

Article

Assessment of injury by four major pests in soybean plants using hyperspectral proximal imaging

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Table S1. Mean reflectance from soybean plants (reproductive stage) under different levels of *Euschistus heros* infestation in each of the 28 bands of greater relevance in the classification based on principal component analysis (PCA).

Spectral band	Stink bugs five plants^{-1a}				df_{Treat}; F; *P*; CV%
	0	2	5	10	
Day 0 – No infestation					
744	0.5736	0.5717	0.5755	0.5699 ns	3; 2.192; 0.0907; 1.90
746	0.5843	0.5823	0.5855	0.5801 ns	3; 2.230; 0.0864; 1.84
742	0.5613	0.5597	0.5640	0.5584 ns	3; 2.155; 0.0951; 1.97
748	0.5936	0.5915	0.5942	0.5887 ns	3; 2.438; 0.0662; 1.80
750	0.6019	0.5995	0.6018	0.5964 ns	3; 2.575; 0.0555; 1.78
740	0.5474	0.5459	0.5510	0.5453 ns	3; 2.291; 0.0799; 2.07
753	0.6088	0.6064	0.6083	0.6030 ns	3; 2.604; 0.0550; 1.76
755	0.6150	0.6125	0.6141	0.6088 ns	3; 2.609; 0.0537; 1.75
738	0.5316	0.5305	0.5363	0.5307 ns	3; 2.506; 0.0607; 2.19
934	0.7257	0.7236	0.7221	0.7199 ns	3; 1.382; 0.2498; 1.95
757	0.6203	0.6177	0.6190	0.6138 ns	3; 2.082; 0.0951; 1.74
759	0.6249	0.6222	0.6233	0.6183 ns	3; 2.609; 0.0510; 1.74
937	0.7266	0.7245	0.7230	0.7205 ns	3; 1.466; 0.2255; 1.95
932	0.7249	0.7227	0.7211	0.7189 ns	3; 1.483; 0.2208; 1.95
761	0.6290	0.6263	0.6272	0.6222 ns	3; 2.203; 0.0573; 1.73
768	0.6381	0.6352	0.6357	0.6313 ns	3; 2.534; 0.0645; 1.71
930	0.7243	0.7220	0.7204	0.7179 ns	3; 1.610; 0.1887; 1.96
763	0.6324	0.6296	0.6304	0.6255 ns	3; 2.183; 0.0893; 1.72
770	0.6405	0.6377	0.6380	0.6336 ns	3; 2.583; 0.0592; 1.72
772	0.6427	0.6398	0.6401	0.6358 ns	3; 2.607; 0.0540; 1.71
939	0.7273	0.7252	0.7236	0.7214 ns	3; 1.407; 0.2423; 1.98

766	0.6354	0.6326	0.6332	0.6285 ^{ns}	3; 2.610; 0.0510; 1.72
941	0.7281	0.7259	0.7244	0.7219 ^{ns}	3; 1.451; 0.2296; 1.98
943	0.7292	0.7271	0.7256	0.7232 ^{ns}	3; 1.405; 0.2430; 1.97
921	0.7207	0.7182	0.7166	0.7138 ^{ns}	3; 1.865; 0.1373; 1.98
925	0.7226	0.7202	0.7185	0.7158 ^{ns}	3; 1.815; 0.1461; 1.99
945	0.7297	0.7276	0.7262	0.7238 ^{ns}	3; 1.372; 0.2528; 1.97
774	0.6448	0.6419	0.6420	0.6378 ^{ns}	3; 2.518; 0.0685; 1.71

5 DAI[b]

544	0.0957	0.0999	0.1000	0.1006 ^{ns}	3; 0.794; 0.4989; 7.84
537	0.0933	0.0973	0.0974	0.0979 ^{ns}	3; 0.759; 0.5185; 7.76
546	0.0964	0.1006	0.1008	0.1013 ^{ns}	3; 0.794; 0.4989; 7.86
541	0.0950	0.0992	0.0993	0.0998 ^{ns}	3; 0.776; 0.5089; 7.82
539	0.0943	0.0984	0.0985	0.0990 ^{ns}	3; 0.773; 0.5106; 7.78
548	0.0971	0.1014	0.1015	0.1021 ^{ns}	3; 0.790; 0.5011; 7.88
710	0.1996	0.2075	0.2062	0.2091 ^{ns}	3; 1.250; 0.2933; 6.89
535	0.0920	0.0960	0.0961	0.0966 ^{ns}	3; 0.771; 0.5119; 7.71
712	0.2240	0.2322	0.2307	0.2339 ^{ns}	3; 1.234; 0.2989; 6.45
550	0.0977	0.1020	0.1021	0.1027 ^{ns}	3; 0.798; 0.4966; 7.88
533	0.0902	0.0940	0.0942	0.0946 ^{ns}	3; 0.766; 0.5145; 7.63
708	0.1766	0.1840	0.1829	0.1855 ^{ns}	3; 1.266; 0.2878; 7.27
714	0.2498	0.2581	0.2565	0.2599 ^{ns}	3; 1.208; 0.3084; 5.97
552	0.0980	0.1023	0.1025	0.1030 ^{ns}	3; 0.784; 0.5042; 7.88
554	0.0977	0.1020	0.1022	0.1027 ^{ns}	3; 0.773; 0.5109; 7.87
531	0.0878	0.0916	0.0918	0.0921 ^{ns}	3; 0.767; 0.5142; 7.53
716	0.2767	0.2851	0.2833	0.2867 ^{ns}	3; 1.163; 0.3256; 5.46
556	0.0968	0.1010	0.1012	0.1017 ^{ns}	3; 0.770; 0.5121; 7.86
705	0.1550	0.1619	0.1611	0.1630 ^{ns}	3; 1.265; 0.2880; 7.54
529	0.0849	0.0885	0.0887	0.0889 ^{ns}	3; 0.779; 0.5074; 7.39
558	0.0953	0.0995	0.0997	0.1001 ^{ns}	3; 0.768; 0.5135; 7.83
718	0.3043	0.3126	0.3109	0.3140 ^{ns}	3; 1.090; 0.3551; 4.96
560	0.0935	0.0976	0.0978	0.0982 ^{ns}	3; 0.759; 0.5186; 7.77
703	0.1349	0.1412	0.1406	0.1420 ^{ns}	3; 1.292; 0.2790; 7.69
527	0.0816	0.0850	0.0852	0.0853 ^{ns}	3; 0.801; 0.4952; 7.20
562	0.0914	0.0954	0.0956	0.0959 ^{ns}	3; 0.772; 0.5112; 7.71

525	0.0777	0.0809	0.0812	0.0811 [ns]	3; 0.824; 0.4823; 6.95
720	0.3324	0.3406	0.3389	0.3416 [ns]	3; 0.979; 0.4040; 4.47

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10 DAI

629	0.0595	0.0601	0.0585	0.0580 [ns]	3; 0.841; 0.4734; 4.86
631	0.0595	0.0600	0.0585	0.0580 [ns]	3; 0.861; 0.4628; 4.85
633	0.0593	0.0599	0.0583	0.0578 [ns]	3; 0.933; 0.4260; 4.84
627	0.0595	0.0601	0.0586	0.0581 [ns]	3; 0.808; 0.4909; 4.87
625	0.0596	0.0602	0.0586	0.0582 [ns]	3; 0.790; 0.5010; 4.89
635	0.0590	0.0596	0.0580	0.0575 [ns]	3; 1.014; 0.3881; 4.80
623	0.0598	0.0604	0.0589	0.0584 [ns]	3; 0.764; 0.5158; 4.91
638	0.0585	0.0592	0.0576	0.0570 [ns]	3; 1.199; 0.3118; 4.75
621	0.0602	0.0607	0.0592	0.0587 [ns]	3; 0.685; 0.5626; 4.97
618	0.0606	0.0612	0.0596	0.0592 [ns]	3; 0.632; 0.5954; 5.03
640	0.0580	0.0586	0.0570	0.0565 [ns]	3; 1.353; 0.2590; 4.71
616	0.0612	0.0617	0.0603	0.0598 [ns]	3; 0.558; 0.6437; 5.13
642	0.0574	0.0581	0.0564	0.0559 [ns]	3; 1.566; 0.1996; 4.69
614	0.0620	0.0625	0.0610	0.0605 [ns]	3; 0.496; 0.6858; 5.25
644	0.0568	0.0575	0.0558	0.0553 [ns]	3; 1.759; 0.1570; 4.69
506	0.0545	0.0550	0.0536	0.0533 [ns]	3; 1.034; 0.3793; 4.40
508	0.0557	0.0562	0.0548	0.0545 [ns]	3; 0.870; 0.4582; 4.51
612	0.0628	0.0633	0.0619	0.0614 [ns]	3; 0.425; 0.7355; 5.41
504	0.0535	0.0540	0.0527	0.0523 [ns]	3; 1.160; 0.3267; 4.34
750	0.5998	0.6034	0.6004	0.6011 [ns]	3; 1.555; 0.2025; 1.68
746	0.5813	0.5849	0.5819	0.5828 [ns]	3; 1.503; 0.2157; 1.79
748	0.5911	0.5948	0.5918	0.5926 [ns]	3; 1.568; 0.1991; 4.86
646	0.0563	0.0570	0.0552	0.0547 [ns]	3; 1.892; 0.1330; 4.85
511	0.0572	0.0577	0.0564	0.0560 [ns]	3; 0.708; 0.5483; 4.84
753	0.6072	0.6108	0.6078	0.6084 [ns]	3; 1.569; 0.1989; 4.87
610	0.0637	0.0642	0.0628	0.0623 [ns]	3; 0.362; 0.7807; 4.89
502	0.0528	0.0533	0.0519	0.0516 [ns]	3; 1.198; 0.3122; 4.80
755	0.6137	0.6173	0.6144	0.6149 [ns]	3; 1.557; 0.2018; 4.91

[ns] Non-significative by the F test ($P > 0.05$).

[a] Density (n) of stink bugs five plants^{-1}.

[b] Days after stink bug infestations (DAI).

Table S2. Mean reflectance from soybean plants (reproductive stage) under different levels of *Diceraeus melacanthus* infestation in each of the 28 bands of greater relevance in the classification based on principal component analysis (PCA).

Spectral band	Stink bugs five plants^{-1a}				df$_{Treat}$; F; *P*; CV%
	0	2	5	10	
Day 0 – No infestation					
742	0.5665	0.5651	0.5661	0.5684 ns	3; 0.821; 0.4839; 1.81
740	0.5538	0.5523	0.5537	0.5559 ns	3; 0.974; 0.4059; 1.86
744	0.5776	0.5762	0.5768	0.5792 ns	3; 0.711; 0.5462; 1.78
746	0.5874	0.5861	0.5864	0.5889 ns	3; 0.654; 0.5809; 1.76
738	0.5395	0.5379	0.5398	0.5420 ns	3; 1.165; 0.3245; 1.94
748	0.5962	0.5949	0.5950	0.5975 ns	3; 0.619; 0.6037; 1.75
750	0.6041	0.6028	0.6026	0.6052 ns	3; 0.600; 0.6161; 1.74
753	0.6108	0.6095	0.6091	0.6118 ns	3; 0.600; 0.6156; 1.74
735	0.5237	0.5220	0.5243	0.5265 ns	3; 1.369; 0.2540; 2.05
755	0.6169	0.6156	0.6150	0.6178 ns	3; 0.614; 0.6067; 1.74
757	0.6220	0.6207	0.6200	0.6228 ns	3; 0.614; 0.6070; 1.73
759	0.6265	0.6251	0.6243	0.6271 ns	3; 0.619; 0.6037; 1.73
855	0.7042	0.7020	0.7009	0.7032 ns	3; 0.597; 0.6179; 1.81
857	0.7046	0.7023	0.7012	0.7034 ns	3; 0.604; 0.6132; 1.81
859	0.7047	0.7024	0.7013	0.7034 ns	3; 0.609; 0.6099; 1.81
861	0.7051	0.7028	0.7016	0.7037 ns	3; 0.625; 0.5996; 1.81
864	0.7051	0.7028	0.7016	0.7037 ns	3; 0.629; 0.5974; 1.81
866	0.7057	0.7033	0.7021	0.7041 ns	3; 0.632; 0.5956; 1.81
868	0.7065	0.7041	0.7029	0.7049 ns	3; 0.631; 0.5957; 1.82
870	0.7073	0.7049	0.7037	0.7056 ns	3; 0.629; 0.5975; 1.82
872	0.7076	0.7051	0.7039	0.7058 ns	3; 0.628; 0.5981; 1.82
813	0.6827	0.6806	0.6794	0.6820 ns	3; 0.714; 0.5448; 1.75
815	0.6844	0.6823	0.6810	0.6836 ns	3; 0.705; 0.5504; 1.75
822	0.6887	0.6865	0.6853	0.6879 ns	3; 0.689; 0.5600; 1.77
826	0.6912	0.6891	0.6878	0.6904 ns	3; 0.674; 0.5692; 1.77
828	0.6926	0.6905	0.6892	0.6918 ns	3; 0.663; 0.5761; 1.78
831	0.6936	0.6915	0.6902	0.6928 ns	3; 0.654; 0.5812; 1.78
833	0.6948	0.6927	0.6915	0.6940 ns	3; 0.637; 0.5919; 1.78

			5 DAI[b]		
742	0.5629	0.5661	0.5609	0.5589 ns	3; 1.601; 0.1910; 2.80
744	0.5755	0.5784	0.5733	0.5715 ns	3; 1.554; 0.2020; 2.73
740	0.5483	0.5519	0.5467	0.5445 ns	3; 1.696; 0.1700; 2.87
746	0.5865	0.5891	0.5840	0.5824 ns	3; 1.500; 0.2170; 2.68
748	0.5961	0.5985	0.5934	0.5920 ns	3; 1.476; 0.2230; 2.62
750	0.6045	0.6067	0.6018	0.6002 ns	3; 1.453; 0.2290; 2.57
738	0.5319	0.5361	0.5308	0.5283 ns	3; 1.817; 0.1460; 2.95
753	0.6116	0.6137	0.6087	0.6073 ns	3; 1.473; 0.2240; 2.52
755	0.6176	0.6197	0.6147	0.6134 ns	3; 1.462; 0.2270; 2.48
787	0.6567	0.6588	0.6538	0.6524 ns	3; 1.736; 0.1610; 2.17
794	0.6607	0.6628	0.6580	0.6563 ns	3; 1.747; 0.1590; 2.17
785	0.6551	0.6572	0.6523	0.6508 ns	3; 1.722; 0.1640; 2.19
757	0.6230	0.6249	0.6201	0.6188 ns	3; 1.427; 0.2370; 2.44
789	0.6579	0.6600	0.6552	0.6535 ns	3; 1.7430; 0.160; 2.17
798	0.6636	0.6656	0.6609	0.6589 ns	3; 1.795; 0.1500; 2.17
800	0.6649	0.6670	0.6622	0.6602 ns	3; 1.804; 0.148; 2.16
759	0.6277	0.6296	0.6248	0.6235 ns	3; 1.451; 0.230; 2.41
796	0.6623	0.6643	0.6597	0.6578 ns	3; 1.732; 0.162; 2.16
761	0.6317	0.6336	0.6288	0.6276 ns	3; 1.410, 0.242; 2.38
781	0.6523	0.6545	0.6494	0.6481 ns	3; 1.698; 0.169; 2.20
792	0.6594	0.6615	0.6567	0.6549 ns	3; 1.791; 0.151; 2.17
774	0.6471	0.6491	0.6442	0.6430 ns	3; 1.590; 0.194; 2.22
783	0.6539	0.6560	0.6511	0.6497 ns	3; 1.710; 0.167; 2.19
768	0.6406	0.6426	0.6377	0.6365 ns	3; 1.520; 0.211; 2.29
809	0.6693	0.6713	0.6667	0.6644 ns	3; 1.817; 0.146; 2.16
813	0.6713	0.6732	0.6687	0.6663 ns	3; 1.840; 0.142; 2.17
772	0.6450	0.6472	0.6421	0.6411 ns	3; 1.609; 0.189; 2.23
779	0.6508	0.6529	0.6479	0.6467 ns	3; 1.676; 0.174; 2.20
			10 DAI		
757	0.5665	0.5651	0.5661	0.5684 ns	3; 1.217; 0.3051; 2.33
759	0.5538	0.5523	0.5537	0.5559 ns	3; 1.276; 0.2841; 2.32
755	0.5776	0.5762	0.5768	0.5792 ns	3; 1.138; 0.3353; 2.33
753	0.5874	0.5861	0.5864	0.5889 ns	3; 1.058; 0.3685; 2.33

761	0.5395	0.5379	0.5398	0.5420 [ns]	3; 1.298; 0.2769; 2.32
750	0.5962	0.5949	0.5950	0.5975 [ns]	3; 0.981; 0.4032; 2.33
768	0.6041	0.6028	0.6026	0.6052 [ns]	3; 1.411; 0.2411; 2.30
763	0.6108	0.6095	0.6091	0.6118 [ns]	3; 1.336; 0.2642; 2.31
766	0.5237	0.5220	0.5243	0.5265 [ns]	3; 1.382; 0.2498; 2.31
770	0.6169	0.6156	0.6150	0.6178 [ns]	3; 1.445; 0.2315; 2.29
787	0.6220	0.6207	0.6200	0.6228 [ns]	3; 1.511; 0.2134; 2.25
772	0.6265	0.6251	0.6243	0.6271 [ns]	3; 1.461; 0.2268; 2.29
789	0.7042	0.7020	0.7009	0.7032 [ns]	3; 1.554; 0.2024; 2.25
781	0.7046	0.7023	0.7012	0.7034 [ns]	3; 1.513; 0.2129; 2.27
776	0.7047	0.7024	0.7013	0.7034 [ns]	3; 1.493; 0.2183; 2.28
792	0.7051	0.7028	0.7016	0.7037 [ns]	3; 1.538; 0.2064; 2.25
783	0.7051	0.7028	0.7016	0.7037 [ns]	3; 1.533; 0.2076; 2.27
824	0.7057	0.7033	0.7021	0.7041 [ns]	3; 1.536; 0.2069; 2.22
794	0.7065	0.7041	0.7029	0.7049 [ns]	3; 1.555; 0.2022; 2.25
809	0.7073	0.7049	0.7037	0.7056 [ns]	3; 1.533; 0.2077; 2.22
796	0.7076	0.7051	0.7039	0.7058 [ns]	3; 1.555; 0.2021; 2.24
798	0.6827	0.6806	0.6794	0.6820 [ns]	3; 1.522; 0.2105; 2.24
805	0.6844	0.6823	0.6810	0.6836 [ns]	3; 1.540; 0.2058; 2.23
800	0.6887	0.6865	0.6853	0.6879 [ns]	3; 1.509; 0.2140; 2.23
779	0.6912	0.6891	0.6878	0.6904 [ns]	3; 1.495; 0.2176; 2.27
811	0.6926	0.6905	0.6892	0.6918 [ns]	3; 1.529; 0.2087; 2.23
820	0.6936	0.6915	0.6902	0.6928 [ns]	3; 1.550; 0.2033; 2.23
831	0.6948	0.6927	0.6915	0.6940 [ns]	3; 1.564; 0.1998; 2.23

[ns] Non-significative by the F test ($P > 0.05$).

[a] Density (n) of stink bugs five plants^{-1}.

[b] Days after stink bug infestations (DAI).

Table S3. Mean reflectance from soybean plants (vegetative stage) under different levels of *Chrysodeixis includens* infestation in each of the 28 bands of greater relevance in the classification based on principal component analysis (PCA).

Spectral band	Caterpillars five plants^{-1a}				df$_{Treat}$; F; *P*; CV%
	0	2	5	10	
Day 0 – No infestation					
744	0.5865	0.5883	0.5885	0.5833 ns	3; 1.7704; 0.1545; 2.08
742	0.5749	0.5770	0.5770	0.5717 ns	3; 1.8286; 0.1437; 2.17
746	0.5967	0.5983	0.5986	0.5935 ns	3; 1.6769; 0.1737; 2.01
748	0.6058	0.6071	0.6076	0.6026 ns	3; 1.5792; 0.1961; 1.96
740	0.5616	0.5640	0.5638	0.5584 ns	3; 1.8216; 0.1449; 2.30
750	0.6138	0.6148	0.6155	0.6107 ns	3; 1.4170; 0.2394; 1.94
753	0.6205	0.6214	0.6223	0.6176 ns	3; 1.3049; 0.2744; 1.93
738	0.5467	0.5493	0.5490	0.5435 ns	3; 1.8199; 0.1452; 2.46
755	0.6266	0.6272	0.6283	0.6237 ns	3; 1.2036; 0.3100; 1.92
757	0.6316	0.6321	0.6333	0.6287 ns	3; 1.1342; 0.3367; 1.91
735	0.5303	0.5332	0.5328	0.5271 ns	3; 1.7424; 0.1601; 2.68
759	0.6362	0.6366	0.6379	0.6334 ns	3; 1.0766; 0.3604; 1.90
761	0.6402	0.6405	0.6419	0.6375 ns	3; 1.0065; 0.3913; 1.91
763	0.6434	0.6437	0.6452	0.6409 ns	3; 0.9501; 0.4177; 1.92
766	0.6462	0.6465	0.6481	0.6438 ns	3; 0.9228; 0.4310; 1.91
768	0.6488	0.6491	0.6507	0.6465 ns	3; 0.8876; 0.4487; 1.91
733	0.5122	0.5152	0.5147	0.5089 ns	3; 1.6395; 0.1820; 2.95
770	0.6515	0.6516	0.6535	0.6493 ns	3; 0.8184; 0.4853; 1.94
772	0.6540	0.6541	0.6561	0.6520 ns	3; 0.7774; 0.5080; 1.96
928	0.7418	0.7408	0.7445	0.7375 ns	3; 1.4059; 0.2427; 2.22
774	0.6564	0.6564	0.6585	0.6544 ns	3; 0.7541; 0.5214; 1.99
934	0.7435	0.7429	0.7461	0.7387 ns	3; 1.6979; 0.1692; 2.14
930	0.7418	0.7410	0.7445	0.7375 ns	3; 1.4604; 0.2270; 2.17
925	0.7417	0.7406	0.7444	0.7375 ns	3; 1.3335; 0.2651; 2.23
923	0.7414	0.7401	0.7441	0.7374 ns	3; 1.2471; 0.2942; 2.28
776	0.6586	0.6585	0.6608	0.6567 ns	3; 0.7202; 0.5412; 2.01
932	0.7426	0.7421	0.7453	0.7381 ns	3; 1.5685; 0.1987; 2.15
921	0.7406	0.7391	0.7434	0.7367 ns	3; 1.1762; 0.3203; 2.33

			5 DAI[b]		
928	0.7158 a	0.7198 a	0.7237 a	0.7234 a	3; 2.3018; 0.0788; 2.28
930	0.7164 a	0.7205 a	0.7247 a	0.7247 a	3; 2.5840; 0.0549; 2.29
923	0.7158 a	0.7197 a	0.7233 a	0.7223 a	3; 1.9361; 0.1255; 2.25
925	0.7159 a	0.7198 a	0.7235 a	0.7229 a	3; 2.0945; 0.1027; 2.27
919	0.7128 a	0.7165 a	0.7198 a	0.7185 a	3; 1.6958; 0.1696; 2.21
921	0.7146 a	0.7184 a	0.7219 a	0.7208 a	3; 1.8156; 0.1460; 2.23
932	0.7168 b	0.7206 b	0.7253 a	0.7256 a	3; 2.8160; 0.0407; 2.31
917	0.7118 a	0.7155 a	0.7188 a	0.7171 a	3; 1.6136; 0.1879; 2.20
934	0.7176 b	0.7218 b	0.7264 a	0.7272 a	3; 3.1144; 0.0276; 2.35
937	0.7190 b	0.7233 b	0.7280 a	0.7293 a	3; 3.3415; 0.0206; 2.37
939	0.7200 b	0.7243 b	0.7292 a	0.7308 a	3; 3.5398; 0.0159; 2.39
941	0.7214 b	0.7257 b	0.7307 a	0.7328 a	3; 3.8239; 0.0110; 2.41
914	0.7100 a	0.7137 a	0.7168 a	0.7149 a	3; 1.5293; 0.2086; 2.17
912	0.7091 a	0.7128 a	0.7158 a	0.7136 a	3; 1.4912; 0.2186; 2.16
910	0.7078 a	0.7114 a	0.7143 a	0.7119 a	3; 1.4119; 0.2409; 2.15
943	0.7231 b	0.7174 b	0.7327 a	0.7352 a	3; 4.1415; 0.0072; 2.44
908	0.7070 a	0.7105 a	0.7133 a	0.7108 a	3; 1.3380; 0.2636; 2.14
945	0.7243 b	0.7287 b	0.7342 a	0.7371 a	3; 4.4605; 0.0048; 2.47
905	0.7060 a	0.7095 a	0.7123 a	0.7095 a	3; 1.3066; 0.2738; 2.12
903	0.7049 a	0.7084 a	0.7111 a	0.7081 a	3; 1.2656; 0.2877; 2.11
901	0.7046 a	0.7080 a	0.7105 a	0.7074 a	3; 1.1922; 0.5214; 2.10
948	0.7249 b	0.7294 b	0.7350 a	0.7384 a	3; 4.8665; 0.0028; 2.50
950	0.7256 b	0.7301 b	0.7360 a	0.7399 a	3; 5.2107; 0.0018; 2.52
899	0.7034 a	0.7068 a	0.7093 a	0.7061 a	3; 1.1688; 0.3231; 2.10
897	0.7032 a	0.7065 a	0.7088 a	0.7056 a	3; 1.1307; 0.3381; 2.10
952	0.7266 b	0.7313 b	0.7372 a	0.7416 a	3; 5.5504; 0.0012; 2.56
894	0.7023 a	0.7057 a	0.7079 a	0.7045 a	3; 1.1046; 0.3487; 2.09
892	0.7011 a	0.7044 a	0.7065 a	0.7031 a	3; 1.0742; 0.3614; 2.08
			10 DAI		
695	0.0903 c	0.0956 c	0.1078 b	0.1304 a	3; 41.1336; <0.001; 17.55
697	0.1030 c	0.1101 c	0.1246 b	0.1510 a	3; 43.5954; <0.001; 17.66
610	0.0657 c	0.0700 c	0.0807 b	0.0974 a	3; 46.0758; <0.001; 17.75
608	0.0669 c	0.0714 c	0.0823 b	0.0996 a	3; 46534; <0.001; 17.85

606	0.0679 c	0.0727 c	0.0838 b	0.1015 a	3; 46.7029; <0.001; 17.93
591	0.0723 c	0.0778 c	0.0900 b	0.1090 a	3; 47.4755; <0.001; 18.14
612	0.0646 c	0.0687 c	0.0790 b	0.0953 a	3; 47.7595; <0.001; 17.62
604	0.0689 c	0.0738 c	0.0852 b	0.1032 a	3; 46.9613; <0.001; 17.99
589	0.0731 c	0.0788 c	0.0911 b	0.1103 a	3; 47.4464; <0.001; 18.17
593	0.0716 c	0.0771 c	0.0891 b	0.1080 a	3; 47.4528; <0.001; 18.11
602	0.0696 c	0.0747 c	0.0862 b	0.1044 a	3; 47.1891; <0.001; 18.02
596	0.0711 c	0.0764 c	0.0883 b	0.1070 a	3; 47.3343; <0.001; 18.10
614	0.0636 c	0.0674 c	0.0775 b	0.0931 a	3; 45.2401; <0.001; 17.46
598	0.0706 c	0.0759 c	0.0877 b	0.1063 a	3; 47.3820; <0.001; 18.07
600	0.0702 c	0.0754 c	0.0871 b	0.1055 a	3; 47.2818; <0.001; 18.05
587	0.0741 c	0.0800 c	0.0925 b	0.1120 a	3; 47.5352; <0.001; 18.16
585	0.0754 c	0.0815 c	0.0942 b	0.1140 a	3; 47.5822; <0.001; 18.18
616	0.0626 c	0.0662 c	0.0759 b	0.0912 a	3; 44.8402; <0.001; 17.29
583	0.0769 c	0.0831 c	0.0961 b	0.1162 a	3; 47.4903; <0.001; 18.16
618	0.0619 c	0.0653 c	0.0748 b	0.0896 a	3; 44.3453; <0.001; 17.15
581	0.0785 c	0.0850 c	0.0983 b	0.1187 a	3; 47.4120; <0.001; 18.14
621	0.0613 c	0.0645 c	0.0738 b	0.0884 a	3; 43.9926; <0.001; 17.01
623	0.0609 c	0.0640 c	0.0731 b	0.0875 a	3; 43.6739; <0.001; 16.92
579	0.0805 c	0.0873 c	0.1008 b	0.1216 a	3; 47.4118; <0.001; 18.08
625	0.0606 c	0.0637 c	0.0727 b	0.0869 a	3; 43.5398; <0.001; 16.86
629	0.0605 c	0.0634 c	0.0724 b	0.0865 a	3; 43.3509; <0.001; 16.82
627	0.0605 c	0.0635 c	0.0725 b	0.0866 a	3; 43.4315; <0.001; 16.83
699	0.1193 c	0.1280 c	0.1443 b	0.1734 a	3; 44.3064; <0.001; 16.98

* Mean values followed by the same letter does not differ significantly by the Scott-Knott test ($P<0.05$);

ns Non-significative [F test ($P>0.05$)].

[a] Density (n) of caterpillars five plants^{-1}.

[b] Days after caterpillar infestations (DAI).

Table S4. Mean reflectance from soybean plants (reproductive stage) under different levels of *Chrysodeixis includens* infestation in each of the 28 bands of greater relevance in the classification based on principal component analysis (PCA).

Spectral band	Caterpillars five plants^{-1}[a]				df$_{Treat}$; F; *P*; CV%
	0	2	5	10	
Day 0 – No infestation					
943	0.7455	0.7421	0.7427	0.7369 ns	3; 0.9177; 0.4336; 1.68
948	0.7477	0.7445	0.7453	0.7393 ns	3; 0.7961; 0.4977; 1.70
950	0.7482	0.7453	0.7461	0.7400 ns	3; 0.6727; 0.5699; 1.70
952	0.7489	0.7461	0.7471	0.7410 ns	3; 0.5745; 0.6326; 1.71
954	0.7500	0.7474	0.7486	0.7423 ns	3; 0.4867; 0.6920; 1.71
945	0.7459	0.7425	0.7433	0.7374 ns	3; 0.8823; 0.4516; 1.69
939	0.7434	0.7398	0.7402	0.7346 ns	3; 1.0637; 0.3661; 1.67
941	0.7447	0.7412	0.7416	0.7360 ns	3; 0.9961; 0.3962; 1.67
937	0.7425	0.7388	0.7391	0.7336 ns	3; 1.1574; 0.3277; 1.66
957	0.7490	0.7466	0.7478	0.7416 ns	3; 0.3997; 0.7534; 1.70
959	0.7497	0.7477	0.7490	0.7427 ns	3; 0.3305; 0.8033; 1.71
961	0.7508	0.7489	0.7503	0.7440 ns	3; 0.2772; 0.8418; 1.72
923	0.7382	0.7339	0.7339	0.7285 ns	3; 1.6596; 0.1777; 1.66
925	0.7388	0.7347	0.7347	0.7293 ns	3; 1.5715; 0.1982; 1.66
934	0.7410	0.7372	0.7373	0.7320 ns	3; 1.2816; 0.2824; 1.64
928	0.7390	0.7349	0.7349	0.7296 ns	3; 1.5153; 0.2124; 1.65
921	0.7364	0.7320	0.7319	0.7266 ns	3; 1.8090; 0.1475; 1.65
963	0.7513	0.7496	0.7510	0.7448 ns	3; 0.2439; 0.8656; 1.72
919	0.7355	0.7311	0.7310	0.7258 ns	3; 1.7824; 0.1525; 1.64
932	0.7397	0.7358	0.7357	0.7306 ns	3; 1.3948; 0.2462; 1.64
930	0.7396	0.7356	0.7354	0.7304 ns	3; 1.4741; 0.2235; 1.64
966	0.7524	0.7509	0.7525	0.7461 ns	3; 0.2292; 0.8760; 1.73
917	0.7339	0.7295	0.7293	0.7242 ns	3; 1.8653; 0.1374; 1.64
839	0.6968	0.6922	0.6915	0.6869 ns	3; 2.3745; 0.0720; 1.64
968	0.7527	0.7513	0.7530	0.7464 ns	3; 0.2391; 0.8690; 1.74
837	0.6951	0.6906	0.6899	0.6854 ns	3; 2.3824; 0.0713; 1.62
846	0.7002	0.6956	0.6949	0.6903 ns	3; 2.4266; 0.0674; 1.64
914	0.7326	0.7282	0.7278	0.7229 ns	3; 1.9110; 0.1297; 1.63

			5 DAI[b]		
515	0.0661 a	0.0666 a	0.0688 b	0.0680 b	3; 3.5493; 0.0157; 6.69
513	0.0634 a	0.0636 a	0.0661 b	0.0650 b	3; 3.6529; 0.0137; 6.76
511	0.0613 a	0.0612 a	0.0638 b	0.0625 b	3; 3.8380; 0.0108; 6.84
848	0.7078	0.7034	0.7056	0.7024 ns	3; 1.0469; 0.3732; 2.26
908	0.7317	0.7273	0.7316	0.7291 ns	3; 0.7942; 0.4986; 2.19
910	0.7325	0.7281	0.7326	0.7303 ns	3; 0.8188; 0.4851; 2.19
517	0.0693 a	0.0701 a	0.0721 b	0.0716 b	3; 3.4497; 0.0179; 6.69
850	0.7084	0.7039	0.7062	0.7030 ns	3; 1.0513; 0.3713; 2.25
901	0.7297	0.7251	0.7288	0.7261 ns	3; 0.8076; 0.4912; 2.21
853	0.7090	0.7045	0.7067	0.7035 ns	3; 1.0806; 0.3587; 2.25
857	0.7102	0.7057	0.7080	0.7048 ns	3; 1.0658; 0.3650; 2.24
899	0.7285	0.7240	0.7276	0.7248 ns	3; 0.8260; 0.4812; 2.21
905	0.7307	0.7262	0.7303	0.7277 ns	3; 0.7973; 0.4969; 2.20
855	0.7094	0.7049	0.7071	0.7040 ns	3; 1.0594; 0.3678; 2.25
859	0.7109	0.7064	0.7087	0.7055 ns	3; 1.0434; 0.3747; 2.24
861	0.7119	0.7073	0.7096	0.7065 ns	3; 1.0452; 0.3740; 2.24
864	0.7126	0.7081	0.7103	0.7072 ns	3; 1.0513; 0.3713; 2.24
872	0.7169	0.7123	0.7147	0.7117 ns	3; 1.0007; 0.3939; 2.23
875	0.7177	0.7131	0.7156	0.7126 ns	3; 0.9890; 0.3993; 2.22
892	0.7259	0.7213	0.7245	0.7216 ns	3; 0.8882; 0.4484; 2.22
894	0.7271	0.7225	0.7258	0.7229 ns	3; 0.8718; 0.4569; 2.22
897	0.7277	0.7231	0.7265	0.7237 ns	3; 0.8506; 0.4680; 2.21
903	0.7300	0.7254	0.7294	0.7267 ns	3; 0.8495; 0.4686; 2.20
866	0.7134	0.7089	0.7112	0.7082 ns	3; 1.0120; 0.3887; 2.23
868	0.7143	0.7097	0.7121	0.7091 ns	3; 1.0280; 0.3816; 2.23
870	0.7158	0.7112	0.7136	0.7105 ns	3; 1.0223; 0.3841; 2.23
877	0.7187	0.7141	0.7167	0.7136 ns	3; 0.9909; 0.3984; 2.22
879	0.7193	0.7148	0.7174	0.7145 ns	3; 0.9462; 0.4196; 2.22
			10 DAI		
490	0.0547 b	0.0518 a	0.0561 b	0.0594 c	3; 20.6656; <0.001; 8.00
492	0.0549 b	0.0520 a	0.0564 b	0.0599 c	3; 21.8275; <0.001; 8.06
488	0.0545 a	0.0517 b	0.0560 c	0.0590 d	3; 19.7614; <0.001; 7.94
494	0.0551 b	0.0523 a	0.0566 b	0.0605 c	3; 22.3516; <0.001; 8.22

478	0.0542 a	0.0514 b	0.0557 c	0.0585 d	3; 18.9045; <0.001; 7.90
496	0.0555 b	0.0526 a	0.0570 b	0.0611 c	3; 23.4505; <0.001; 8.30
476	0.0543 a	0.0515 b	0.0557 c	0.0585 d	3; 18.8420; <0.001; 7.85
468	0.0543 a	0.0516 b	0.0558 c	0.0585 d	3; 18.2635; <0.001; 7.84
466	0.0544 a	0.0517 b	0.0559 c	0.0585 d	3; 17.9560; <0.001; 7.91
457	0.0550 a	0.0522 b	0.0566 c	0.0591 d	3; 18.3387; <0.001; 7.82
480	0.0542 a	0.0515 b	0.0557 c	0.0586 d	3; 18.7626; <0.001; 7.93
455	0.0551 a	0.0523 b	0.0567 c	0.0592 d	3; 18.0998; <0.001; 7.84
486	0.0544 a	0.0516 b	0.0559 c	0.0588 d	3; 19.3426; <0.001; 7.94
461	0.0546 a	0.0519 b	0.0562 c	0.0588 d	3; 18.3614; <0.001; 7.85
482	0.0543 a	0.0515 b	0.0558 c	0.0586 d	3; 18.8938; <0.001; 7.90
474	0.0543 a	0.0515 b	0.0558 c	0.0585 d	3; 18.6854; <0.001; 7.82
463	0.0545 a	0.0518 b	0.0561 c	0.0587 d	3; 18.2047; <0.001; 7.84
470	0.0543 a	0.0515 b	0.0557 c	0.0583 d	3; 18.1679; <0.001; 7.80
484	0.0544 a	0.0516 b	0.0558 c	0.0587 d	3; 18.8526; <0.001; 7.95
453	0.0552 a	0.0524 b	0.0568 c	0.0592 d	3; 17.7321; <0.001; 7.79
500	0.0565 a	0.0536 b	0.0582 c	0.0633 d	3; 26.0742; <0.001; 8.74
498	0.0559 a	0.0530 b	0.0575 c	0.0621 d	3; 24.9250; <0.001; 8.44
472	0.0543 a	0.0515 b	0.0558 c	0.0584 d	3; 18.2579; <0.001; 7.89
459	0.0548 a	0.0521 b	0.0564 c	0.0588 d	3; 17.6488; <0.001; 7.86
451	0.0552 a	0.0524 b	0.0568 c	0.0592 d	3; 17.2936; <0.001; 7.83
449	0.0553 a	0.0525 b	0.0569 c	0.0591 d	3; 16.8298; <0.001; 7.87
447	0.0553 a	0.0525 b	0.0569 c	0.0591 d	3; 16.4730; <0.001; 7.86
445	0.0553 a	0.0526 b	0.0569 c	0.0590 d	3; 15.8273; <0.001; 7.87

* Mean values followed by the same letter does not differ significantly by the Scott-Knott test ($P < 0.05$);

[ns] Non-significative [F test ($P > 0.05$)].

[a] Density (n) of caterpillars five plants^{-1}.

[b] Days after caterpillar infestations (DAI).

Table S5. Mean reflectance from soybean plants (vegetative stage) under different levels of *Spodoptera eridania* infestation in each of the 28 bands of greater relevance in the classification based on principal component analysis (PCA).

Spectral band	Caterpillars five plants^{-1a}				df_{Treat}; F; *P*; CV%
	0	2	5	0	
Day 0 – No infestation					
633	0.0587	0.0584	0.0594	0.0593 ^{ns}	3; 0.9925; 0.3980; 5.02
742	0.5669	0.5636	0.5671	0.5643 ^{ns}	3; 1.5985; 0.1920; 1.56
631	0.0589	0.0588	0.0597	0.0595 ^{ns}	3; 0.9345; 0.4256; 5.02
629	0.0590	0.0589	0.0598	0.0596 ^{ns}	3; 0.9077; 0.4389; 5.01
627	0.0591	0.0590	0.0599	0.0597 ^{ns}	3; 0.8732; 0.4564; 5.02
729	0.4677	0.4687	0.4697	0.4643 ^{ns}	3; 2.1780; 0.0929; 2.13
511	0.0569	0.0567	0.0574	0.0570 ^{ns}	3; 0.4599; 0.7107; 4.79
623	0.0595	0.0595	0.0604	0.0601 ^{ns}	3; 0.8421; 0.4727; 5.01
625	0.0593	0.0592	0.0601	0.0598 ^{ns}	3; 0.8558; 0.4655; 5.01
740	0.5544	0.5516	0.5548	0.5517 ^{ns}	3; 1.5141; 0.2131; 1.59
621	0.0601	0.0602	0.0610	0.0606 ^{ns}	3; 0.8064; 0.4921; 5.02
746	0.5864	0.5824	0.5863	0.5843 ^{ns}	3; 1.8061; 0.1484; 1.52
618	0.0607	0.0609	0.0617	0.0613 ^{ns}	3; 0.8252; 0.4819; 5.04
738	0.5407	0.5384	0.5412	0.5377 ^{ns}	3; 1.5092; 0.2143; 1.64
616	0.0616	0.0620	0.0627	0.0622 ^{ns}	3; 0.8625; 0.4620; 5.09
506	0.0527	0.0518	0.0528	0.0529 ^{ns}	3; 1.4702; 0.2248; 5.04
513	0.0598	0.0602	0.0606	0.0599 ^{ns}	3; 0.5935; 0.6202; 4.87
614	0.0627	0.0633	0.0639	0.0633 ^{ns}	3; 0.9326; 0.4265; 5.15
735	0.5249	0.5234	0.5259	0.5219 ^{ns}	3; 1.5229; 0.2108; 1.71
755	0.6115	0.6072	0.6117	0.6108 ^{ns}	3; 2.191; 0.0913; 1.47
612	0.0640	0.0647	0.0653	0.0645 ^{ns}	3; 1.0925; 0.3541; 5.24
610	0.0653	0.0662	0.0667	0.0658 ^{ns}	3; 1.2436; 0.2959; 5.34
596	0.0714	0.0732	0.0734	0.0719 ^{ns}	3; 2.0934; 0.1034; 5.84
733	0.5076	0.5068	0.5089	0.5045 ^{ns}	3; 1.6537; 0.1793; 1.81
748	0.5943	0.5901	0.5942	0.5925 ^{ns}	3; 1.8987; 0.1321; 1.50
608	0.0666	0.0677	0.0682	0.0671 ^{ns}	3; 1.4320; 0.2356; 5.45
508	0.0545	0.0539	0.0548	0.0547 ^{ns}	3; 0.8193; 0.4850; 4.86
750	0.6009	0.5966	0.6008	0.5994 ^{ns}	3; 1.9982; 0.1166; 1.49

			5 DAI[b]		
787	0.6381 a	0.6426 a	0.6401 a	0.6427 a	3; 2.1810; 0.0920; 1.58
785	0.6355 a	0.6402 a	0.6376 a	0.6401 a	3; 2.1952; 0.0903; 1.58
789	0.6411 a	0.6456 a	0.6432 a	0.6457 a	3; 2.1870; 0.0913; 1.58
783	0.6332 a	0.6379 a	0.6353 a	0.6377 a	3; 2.1887; 0.0911; 1.58
792	0.6443 a	0.6488 a	0.6464 a	0.6490 a	3; 2.1483; 0.0959; 1.58
781	0.6306 a	0.6353 a	0.6326 a	0.6351 a	3; 2.1733; 0.0929; 1.59
779	0.6279 a	0.6325 a	0.6298 a	0.6322 a	3; 2.1905; 0.0909; 1.58
776	0.6254 a	0.6301 a	0.6273 a	0.6297 a	3; 2.2164; 0.0879; 1.58
794	0.6478 a	0.6524 a	0.6499 a	0.6526 a	3; 2.1629; 0.0941; 1.59
774	0.6229 a	0.6276 a	0.6248 a	0.6271 a	3; 2.1685; 0.0934; 1.58
796	0.6513 a	0.6558 a	0.6534 a	0.6561 a	3; 2.1240; 0.0989; 1.60
798	0.6547 a	0.6592 a	0.6568 a	0.6596 a	3; 2.1359; 0.0974; 1.60
772	0.6208 a	0.6255 a	0.6226 a	0.6249 a	3; 2.1509; 0.0956; 1.59
800	0.6579 a	0.6624 a	0.6601 a	0.6629 a	3; 2.1115; 0.1005; 1.60
802	0.6612 a	0.6657 a	0.6634 a	0.6662 a	3; 2.1183; 0.0996; 1.61
805	0.6643 a	0.6688 a	0.6666 a	0.6695 a	3; 2.1335; 0.0977; 1.61
811	0.6740 a	0.6785 a	0.6763 a	0.6793 a	3; 2.1392; 0.0970; 1.62
809	0.6705 a	0.6750 a	0.6728 a	0.6758 a	3; 2.1522; 0.0954; 1.61
807	0.6674 a	0.6719 a	0.6696 a	0.6726 a	3; 2.1311; 0.0980; 1.61
770	0.6184 a	0.6231 a	0.6201 a	0.6224 a	3; 2.1635; 0.0940; 1.60
892	0.7200 b	0.7260 a	0.7240 a	0.7267 a	3; 2.6858; 0.0481; 1.70
813	0.6768 a	0.6813 a	0.6791 a	0.6822 a	3; 2.1387; 0.0971; 1.62
815	0.6802 a	0.6847 a	0.6825 a	0.6856 a	3; 2.1427; 0.0966; 1.62
901	0.7174 b	0.7236 a	0.7217 a	0.7243 a	3; 2.8163; 0.0406; 1.72
894	0.7193 b	0.7254 a	0.7234 a	0.7261 a	3; 2.7074; 0.0468; 1.71
888	0.7211 b	0.7270 a	0.7250 a	0.7277 a	3; 2.5939; 0.0498; 1.70
879	0.7224 a	0.7280 a	0.7260 a	0.7288 a	3; 2.4760; 0.0630; 1.67
886	0.7215 b	0.7273 a	0.7253 a	0.7280 a	3; 2.5495; 0.0499; 1.70
			10 DAI		
731	0.4922	0.4941	0.4967	0.4933 ns	3; 0.6051; 0.6125; 3.32
733	0.5119	0.5139	0.5159	0.5127 ns	3; 0.5324; 0.6607; 3.05
729	0.4709	0.4727	0.4759	0.4723 ns	3; 0.6823; 0.5637; 3.64
735	0.5298	0.5319	0.5333	0.5304 ns	3; 0.4905; 0.6893; 2.84

727	0.4480	0.4498	0.4536	0.4498 ns	3; 0.7651; 0.5151; 4.03
725	0.4233	0.4251	0.4295	0.4255 ns	3; 0.8504; 0.4681; 4.48
738	0.5461	0.5483	0.5492	0.5464 ns	3; 0.4557; 0.7136; 2.67
723	0.3969	0.3988	0.4038	0.3996 ns	3; 0.9303; 0.4273; 5.00
740	0.5607	0.5630	0.5634	0.5609 ns	3; 0.4281; 0.7331; 2.55
720	0.3695	0.3715	0.3769	0.3727 ns	3; 1.0125; 0.3886; 5.57
718	0.3412	0.3433	0.3491	0.3448 ns	3; 1.0836; 0.3575; 6.21
742	0.5734	0.5758	0.5757	0.5735 ns	3; 0.4263; 0.7344; 2.45
716	0.3128	0.3151	0.3210	0.3168 ns	3; 1.1436; 0.3330; 6.88
943	0.7229 b	0.7328 a	0.7336 a	0.7372 a	3; 5.3860; 0.0014; 2.41
939	0.7231 b	0.7327 a	0.7333 a	0.7366 a	3; 4.9616; 0.0025; 2.40
934	0.7237 b	0.7331 a	0.7338 a	0.7367 a	3; 4.6572; 0.0037; 2.39
941	0.7221 b	0.7319 a	0.7325 a	0.7360 a	3; 5.1410; 0.0020; 2.40
945	0.7234 b	0.7335 a	0.7343 a	0.7380 a	3; 5.6321; 0.0010; 2.41
937	0.7238 b	0.7333 a	0.7339 a	0.7371 a	3; 4.8081; 0.0030; 2.39
948	0.7230 b	0.7332 a	0.7340 a	0.7379 a	3; 5.7965; <0.001; 2.42
930	0.7246 b	0.7336 a	0.7340 a	0.7367 a	3; 4.1642; 0.0070; 2.38
928	0.7246 b	0.7336 a	0.7339 a	0.7365 a	3; 4.0012; 0.0087; 2.37
932	0.7241 b	0.7334 a	0.7339 a	0.7367 a	3; 4.4382; 0.0049; 2.38
925	0.7257 b	0.7344 a	0.7346 a	0.7372 a	3; 3.7742; 0.0117; 2.36
923	0.7264 b	0.7350 a	0.7352 a	0.7376 a	3; 3.6324; 0.0141; 2.36
950	0.7226 b	0.7329 a	0.7338 a	0.7379 a	3; 6.0833; <0.001; 2.43
952	0.7216 b	0.7321 a	0.7330 a	0.7374 a	3; 6.3100; <0.001; 2.44
919	0.7269 b	0.7353 a	0.7354 a	0.7376 a	3; 3.4242; 0.0185; 2.34

* Mean values followed by the same letter does not differ significantly by the Scott-Knott test ($P < 0.05$);

ns Non-significative [F test ($P > 0.05$)].

[a] Density (n) of caterpillars five plants^{-1}.

[b] Days after caterpillar infestations (DAI).

Table S6. Mean reflectance from soybean plants (reproductive stage) under different levels of *Spodoptera eridania* infestation in each of the 28 bands of greater relevance in the classification based on principal component analysis (PCA).

Spectral band	Caterpillars five plants^{-1a}				df$_{Treat}$; F; *P*; CV%
	0	2	5	10	
Day 0 – No infestation					
744	0.5781	0.5829	0.5836	0.5860 ns	3; 2.3205; 0.0722; 2.38
742	0.5659	0.5714	0.5714	0.5743 ns	3; 2.4957; 0.0617; 2.48
740	0.5524	0.5584	0.5577	0.5613 ns	3; 2.7125; 0.0538; 2.59
746	0.5885	0.5928	0.5940	0.5960 ns	3; 2.1949; 0.0906; 2.31
748	0.5980	0.6019	0.6036	0.6052 ns	3; 2.1099; 0.1009; 2.25
750	0.6064	0.6099	0.6119	0.6133 ns	3; 2.0242; 0.1125; 2.19
738	0.5368	0.5436	0.5420	0.5464 ns	3; 2.7844; 0.0529; 2.73
753	0.6136	0.6167	0.6190	0.6202 ns	3; 1.9874; 0.1178; 2.15
813	0.6977	0.6989	0.7021	0.7031 ns	3; 1.6322; 0.1839; 1.86
822	0.7077	0.7088	0.7121	0.7132 ns	3; 1.5994; 0.1915; 1.87
824	0.7097	0.7108	0.7141	0.7152 ns	3; 1.6033; 0.1906; 1.87
807	0.6903	0.6915	0.6947	0.6957 ns	3; 1.6743; 0.1745; 1.86
811	0.6952	0.6964	0.6996	0.7006 ns	3; 1.6473; 0.1805; 1.86
818	0.7031	0.7042	0.7074	0.7085 ns	3; 1.6201; 0.1866; 1.87
755	0.6196	0.6225	0.6250	0.6260 ns	3; 1.9448; 0.1243; 2.11
815	0.7003	0.7014	0.7047	0.7057 ns	3; 1.6330; 0.1837; 1.86
820	0.7052	0.7063	0.7095	0.7106 ns	3; 1.6303; 0.1843; 1.87
809	0.6927	0.6938	0.6971	0.6981 ns	3; 1.6667; 0.1762; 1.86
826	0.7119	0.7130	0.7162	0.7174 ns	3; 1.5958; 0.1924; 1.87
831	0.7163	0.7173	0.7206	0.7218 ns	3; 1.5923; 0.1932; 1.87
828	0.7144	0.7155	0.7187	0.7199 ns	3; 1.5579; 0.2016; 1.87
939	0.7460	0.7468	0.7491	0.7512 ns	3; 1.1316; 0.3379; 1.92
833	0.7186	0.7197	0.7229	0.7241 ns	3; 1.5447; 0.2049; 1.87
943	0.7472	0.7479	0.7502	0.7524 ns	3; 1.1453; 0.3325; 1.92
937	0.7460	0.7467	0.7491	0.7510 ns	3; 1.1176; 0.3436; 1.92
934	0.7457	0.7463	0.7488	0.7507 ns	3; 1.1188; 0.3432; 1.91
945	0.7480	0.7488	0.7510	0.7534 ns	3; 1.2059; 0.3093; 1.93
802	0.6853	0.6865	0.6898	0.6907 ns	3; 1.6737; 0.1747; 1.87

		5 DAI[b]			
650	0.0559 a	0.0562 a	0.0562 a	0.0636 b	3; 9.0475; <0.001; 14.50
652	0.0557 a	0.0560 a	0.0560 a	0.0635 b	3; 9.0147; <0.001; 14.59
654	0.0555 a	0.0559 a	0.0559 a	0.0634 b	3; 9.0353; <0.001; 14.68
657	0.0552 a	0.0557 a	0.0557 a	0.0631 b	3; 9.0344; <0.001; 14.78
659	0.0550 a	0.0555 a	0.0555 a	0.0629 b	3; 9.0190; <0.001; 14.88
661	0.0547 a	0.0553 a	0.0553 a	0.0627 b	3; 8.9807; <0.001; 15.00
648	0.0563 a	0.0565 a	0.0565 a	0.0639 b	3; 8.9746; <0.001; 14.37
663	0.0545 a	0.0552 a	0.0552 a	0.0626 b	3; 8.8978; <0.001; 15.07
646	0.0570 a	0.0570 a	0.0571 a	0.0644 b	3; 8.9191; <0.001; 14.16
665	0.0546 a	0.0553 a	0.0554 a	0.0627 b	3; 8.8047; <0.001; 15.11
667	0.0549 a	0.0557 a	0.0558 a	0.0630 b	3; 8.6825; <0.001; 15.08
644	0.0578 a	0.0577 a	0.0578 a	0.0651 b	3; 8.8160; <0.001; 13.94
669	0.0555 a	0.0564 a	0.0565 a	0.0637 b	3; 8.5630; <0.001; 15.03
690	0.0717 a	0.0727 a	0.0734 a	0.0827 b	3; 8.5726; <0.001; 15.58
671	0.0564 a	0.0573 a	0.0574 a	0.0646 b	3; 8.4151; <0.001; 14.93
673	0.0575 a	0.0584 a	0.0586 a	0.0657 b	3; 8.2681; <0.001; 14.84
735	0.5256 a	0.5327 a	0.5342 a	0.5680 b	3; 9.3949; <0.001; 7.68
738	0.5423 a	0.5506 a	0.5521 a	0.5876 b	3; 9.6417; <0.001; 7.79
740	0.5576 a	0.5670 a	0.5684 a	0.6057 b	3; 9.8254; <0.001; 7.91
642	0.0587 a	0.0585 a	0.0586 a	0.0658 b	3; 8.6615; <0.001; 13.70
733	0.5072 a	0.5130 a	0.5147 a	0.5466 b	3; 9.1029; <0.001; 7.60
742	0.5710 a	0.5816 a	0.5828 a	0.6220 b	3; 10.0024; <0.001; 8.05
899	0.7264 a	0.7534 a	0.7532 a	0.8341 b	3; 11.3238; <0.001; 12.12
901	0.7269 a	0.7540 a	0.7538 a	0.8348 b	3; 11.3259; <0.001; 12.14
903	0.7267 a	0.7538 a	0.7537 a	0.8347 b	3; 11.3160; <0.001; 12.16
905	0.7273 a	0.7545 a	0.7545 a	0.8357 b	3; 11.3141; <0.001; 12.18
908	0.7274 a	0.7546 a	0.7547 a	0.8360 b	3; 11.3121; <0.001; 12.20
910	0.7279 a	0.7552 a	0.7553 a	0.8368 b	3; 11.3119; <0.001; 12.23
		10 DAI			
809	0.6716 a	0.6889 b	0.6855 b	0.6928 b	3; 3.1716; 0.0256; 5.07
824	0.6777 a	0.6959 b	0.6923b	0.7003 b	3; 3.3646; 0.0200; 5.18
828	0.6795 a	0.6979 b	0.6944 b	0.7026 b	3; 3.4321; 0.0183; 5.20
831	0.6805 a	0.6990 b	0.6955 b	0.7037 b	3; 3.4367; 0.0182; 5.22

835	0.6821 a	0.7008 b	0.6973 b	0.7056 b	3; 3.4836; 0.0171; 5.24
837	0.6834 a	0.7021 b	0.6986 b	0.7070 b	3; 3.5008; 0.0167; 5.25
839	0.6844 a	0.7032 b	0.6997 b	0.7081 b	3; 3.5066; 0.0166; 5.26
842	0.6853 a	0.7043 b	0.7008 b	0.7093 b	3; 3.5282; 0.161; 5.27
844	0.6863 a	0.7054 b	0.7018 b	0.7104 b	3; 3.5404; 0.0159; 5.29
846	0.6873 a	0.7065 b	0.7029 b	0.7115 b	3; 3.5560; 0.0156; 5.30
792	0.6634 a	0.6794 b	0.6762 b	0.6826 b	3; 2.9027; 0.0363; 4.91
794	0.6643 a	0.6805 b	0.6772 b	0.6837 b	3; 2.9312; 0.035; 4.93
796	0.6651 a	0.6814 b	0.6782 b	0.6846 b	3; 2.9392; 0.0347; 4.96
798	0.6670 a	0.6836 b	0.6802 b	0.6868 b	3; 2.9915; 0.0324; 4.98
800	0.6678 a	0.6846 b	0.6812 b	0.6880 b	3; 3.0252; 0.0310; 5.00
802	0.6689 a	0.6858 b	0.6824 b	0.6893 b	3; 3.0654; 0.0294; 5.02
805	0.6698 a	0.6869 b	0.6835 b	0.6905 b	3; 3.0996; 0.0282; 5.04
807	0.6709 a	0.6881 b	0.6847 b	0.6917 b	3; 3.1300; 0.0271; 5.05
811	0.6725 a	0.6899 b	0.6865 b	0.6939 b	3; 3.1996; 0.0247; 5.09
813	0.6732 a	0.6907 b	0.6873 b	0.6947 b	3; 3.2249; 0.0239; 5.10
815	0.6743 a	0.6919 b	0.6885 b	0.6961 b	3; 3.2592; 0.0229; 5.12
818	0.6752 a	0.6930 b	0.6896 b	0.6972 b	3; 3.2823; 0.0222; 5.13
820	0.6762 a	0.6941 b	0.6907 b	0.6984 b	3; 3.3088; 0.0215; 5.15
822	0.6767 a	0.6948 b	0.6913 b	0.6991 b	3; 3.3388; 0.0206; 5.16
826	0.6785 a	0.6967 b	0.6932 b	0.7012 b	3; 3.3783; 0.0196; 5.19
833	0.6811 a	0.6997 b	0.6962 b	0.7044 b	3; 3.4623; 0.0176; 5.23
848	0.6883 a	0.7076 b	0.7039 b	0.7125 b	3; 3.5480; 0.0157; 5.31
850	0.6891 a	0.7085 b	0.7048 b	0.7134 b	3; 3.5520; 0.0156; 5.31

* Mean values followed by the same letter does not differ significantly by the Scott-Knott test ($P < 0.05$);

[ns] Non-significative [F test ($P > 0.05$)].

[a] Density (n) of caterpillars five plants^{-1}.

[b] Days after caterpillar infestations (DAI).