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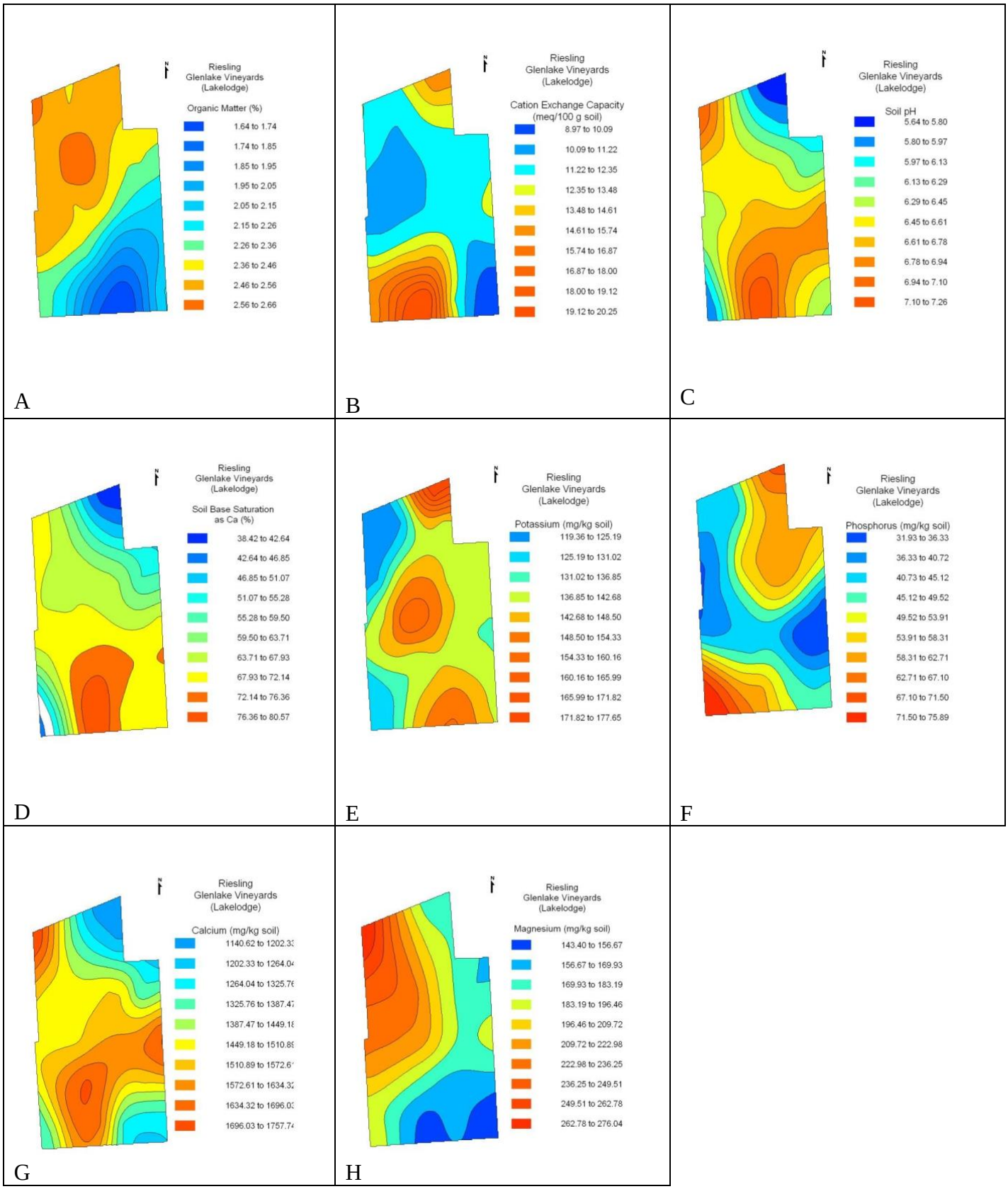


Figure S1. Spatial distribution of: A: Soil organic matter; B: soil cation exchange capacity; C: Soil pH; D: Soil base saturation (as Ca); E: Soil phosphorus; F: Soil potassium; G: Soil calcium; H: Soil magnesium, Glenlake Vineyard, Niagara-on-the-Lake, ON, 2005.

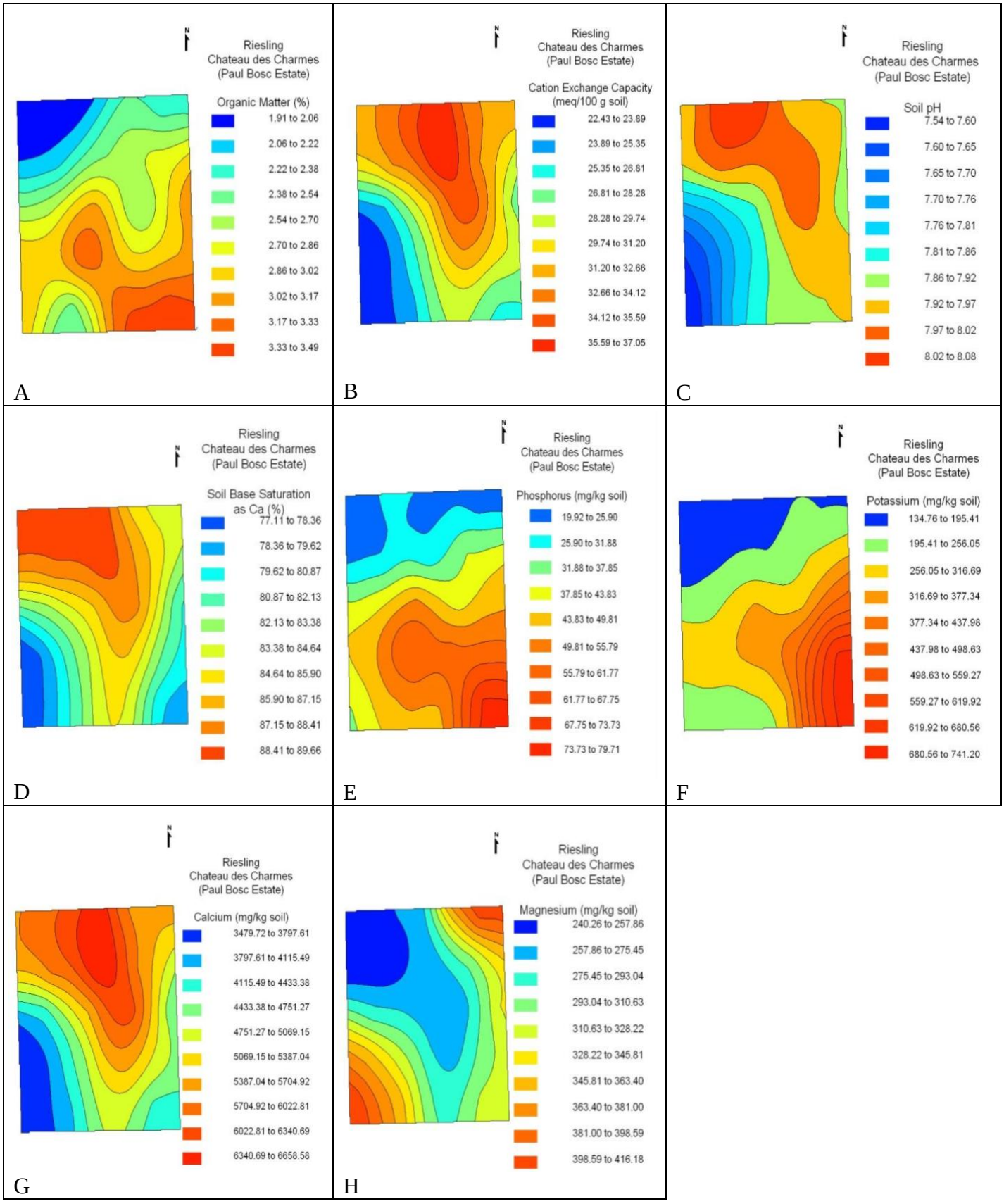


Figure S2. Spatial distribution of: A: Soil organic matter; B: soil cation exchange capacity; C: Soil pH; D: Soil base saturation (as Ca); E: Soil phosphorus; F: Soil potassium; G: Soil calcium; H: Soil magnesium, Chateau des Charmes Vineyard, St. Davids, ON, 2005.

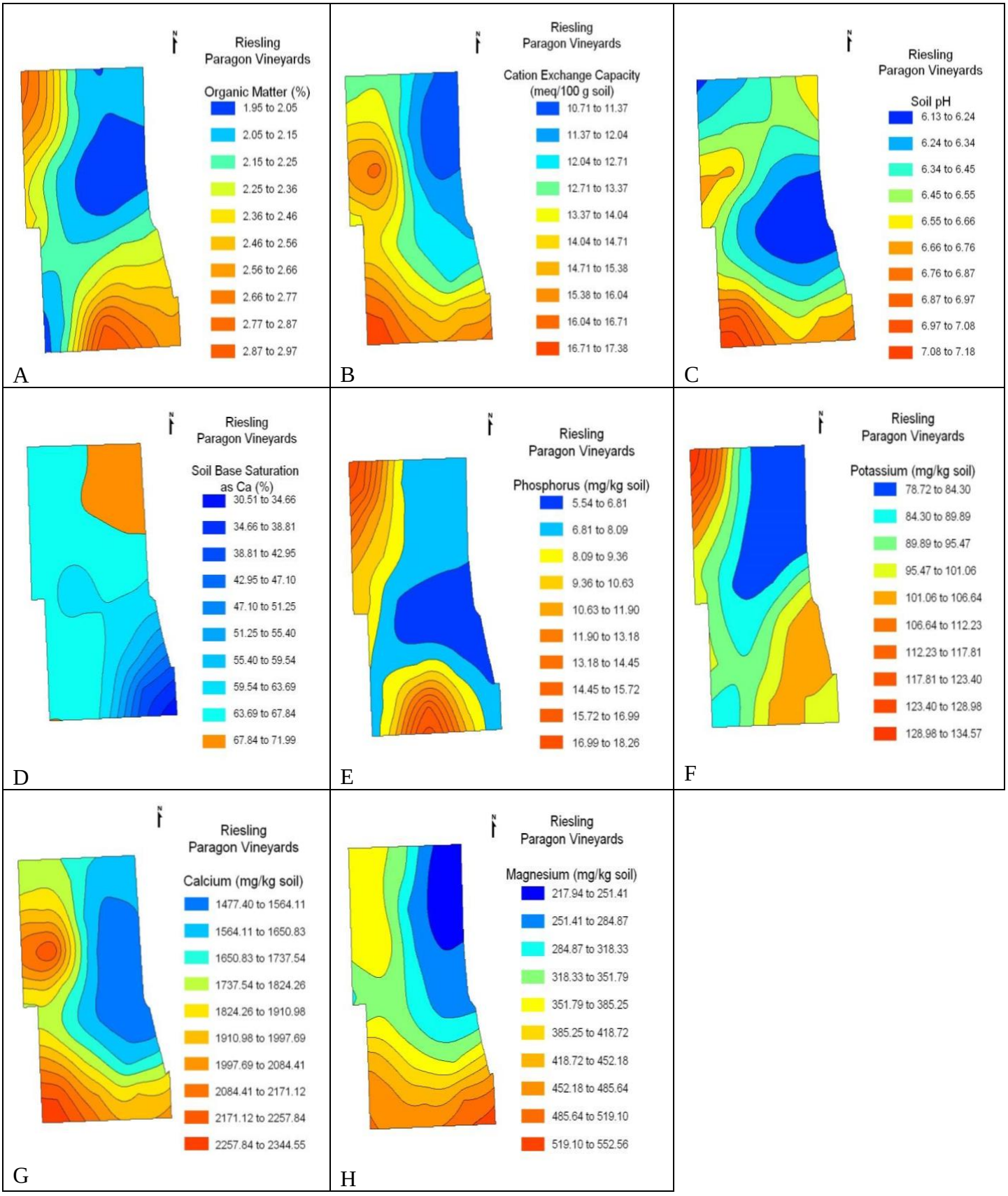


Figure S3. Spatial distribution of: A: Soil organic matter; B: soil cation exchange capacity; C: Soil pH; D: Soil base saturation (as Ca); E: Soil phosphorus; F: Soil potassium; G: Soil calcium; H: Soil magnesium, Paragon Vineyard, Jordan, ON, 2005.

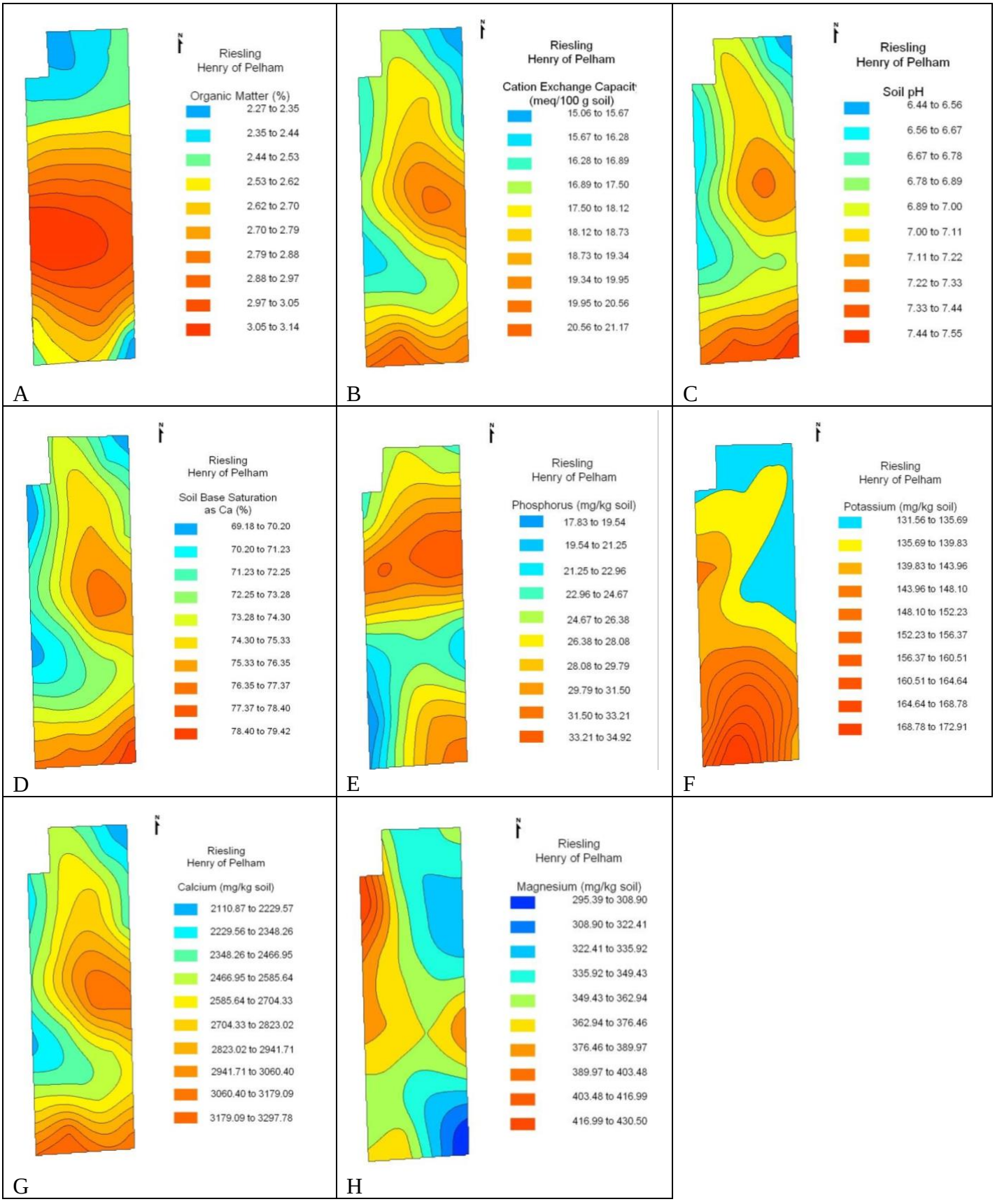


Figure S4. Spatial distribution of: A: Soil organic matter; B: soil cation exchange capacity; C: Soil pH; D: Soil base saturation (as Ca); E: Soil phosphorus; F: Soil potassium; G: Soil calcium; H: Soil magnesium, Henry of Pelham Vineyard, St. Catharines, ON, 2005.

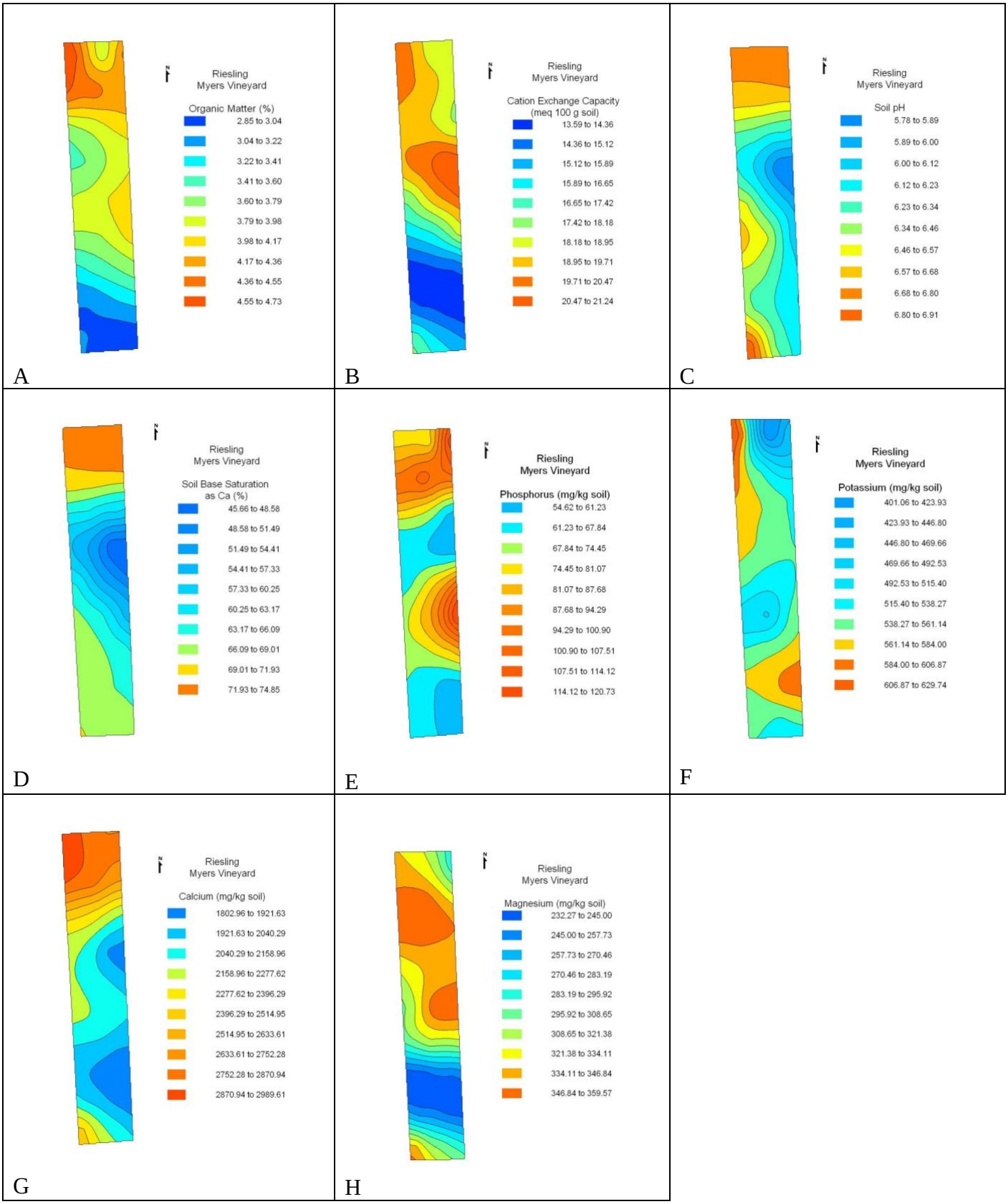


Figure S5. Spatial distribution of: A: Soil organic matter; B: soil cation exchange capacity; C: Soil pH; D: Soil base saturation (as Ca); E: Soil phosphorus; F: Soil potassium; G: Soil calcium; H: Soil magnesium, Myers Vineyard, Vineland, ON, 2005.

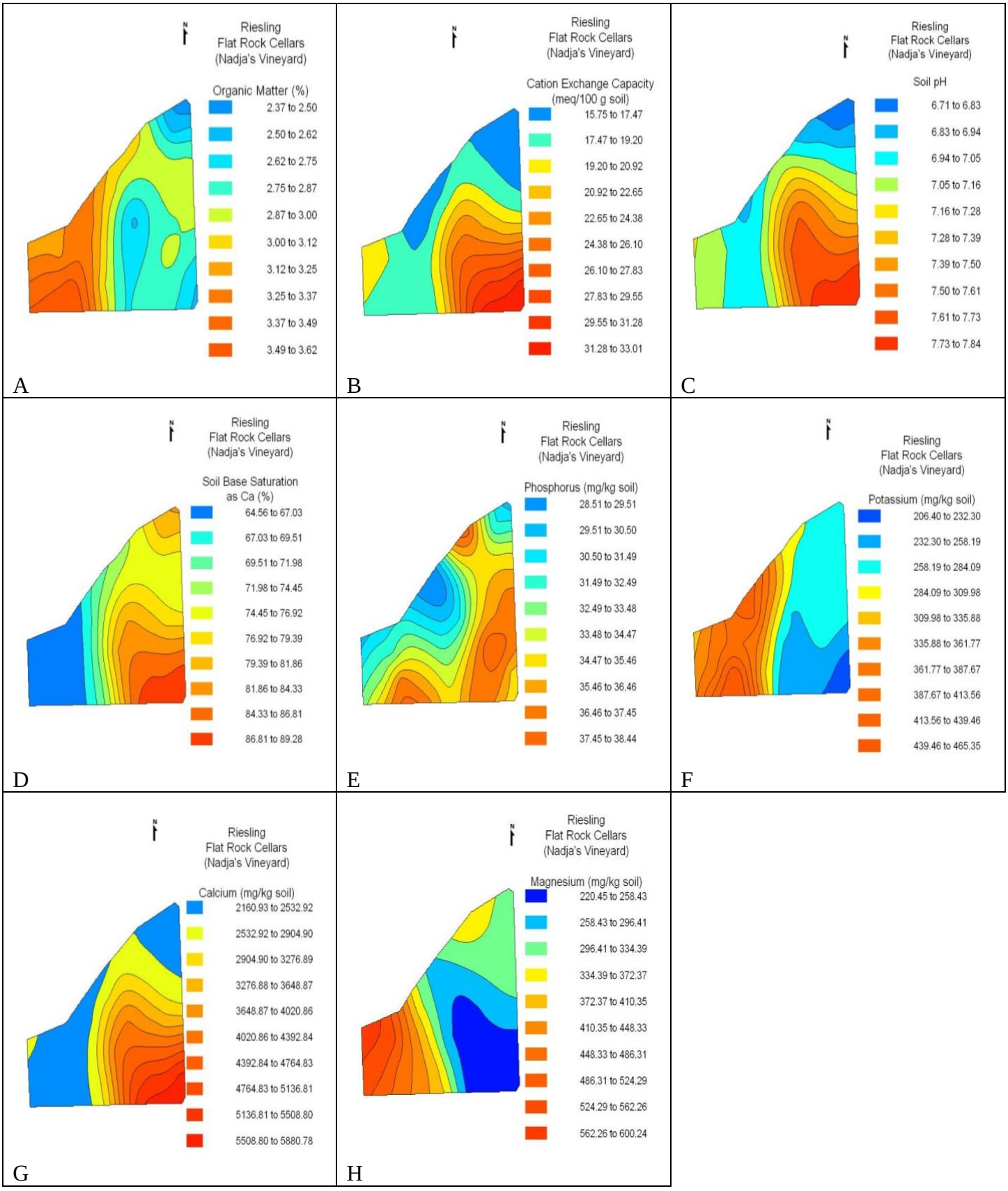


Figure S6. Spatial distribution of: A: Soil organic matter; B: soil cation exchange capacity; C: Soil pH; D: Soil base saturation (as Ca); E: Soil phosphorus; F: Soil potassium; G: Soil calcium; H: Soil magnesium, Flat Rock Vineyard, Jordan, ON, 2005.

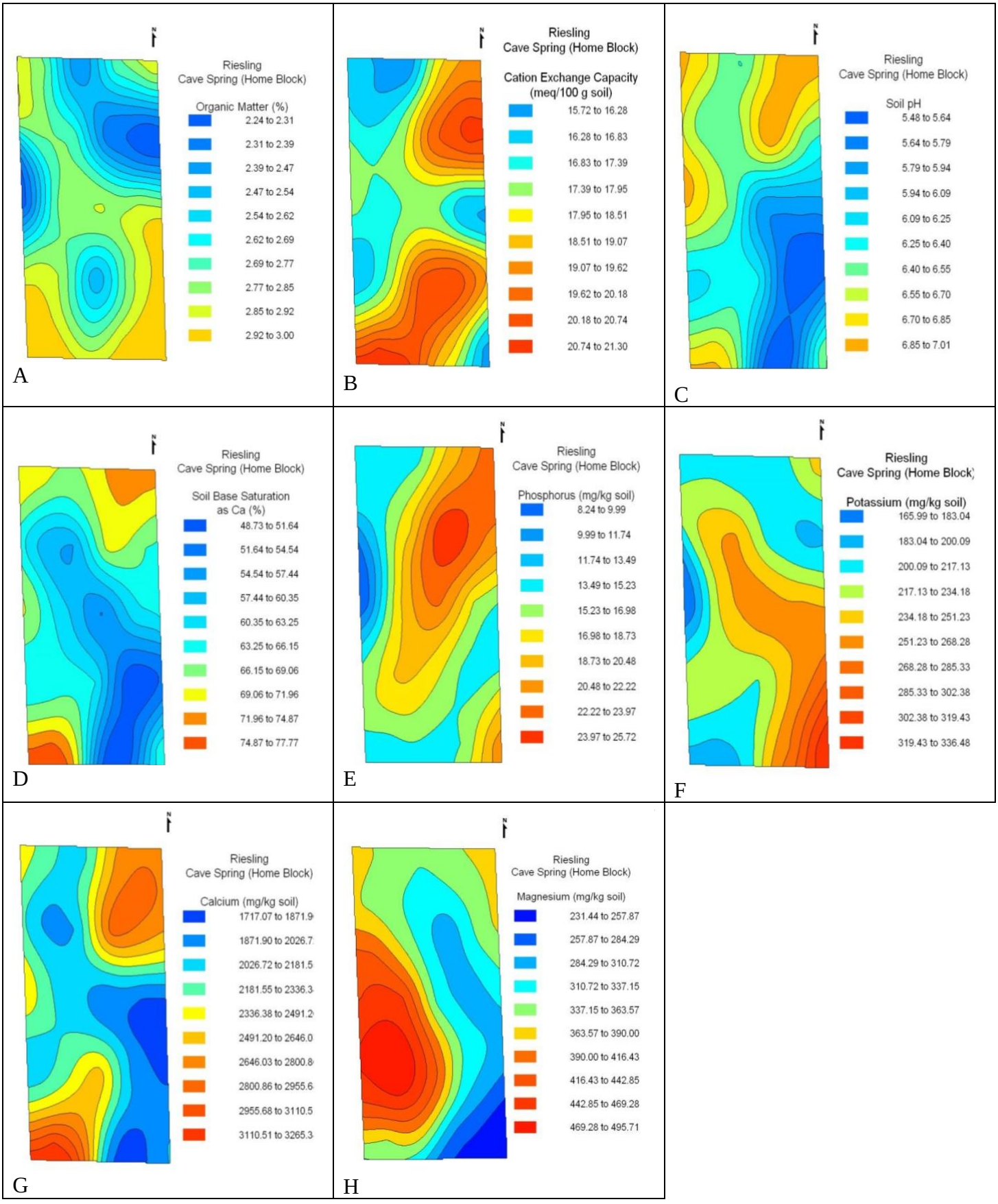


Figure S7. Spatial distribution of: A: Soil organic matter; B: soil cation exchange capacity; C: Soil pH; D: Soil base saturation (as Ca); E: Soil phosphorus; F: Soil potassium; G: Soil calcium; H: Soil magnesium, Cave Spring Vineyard, Beamsville, ON, 2005.

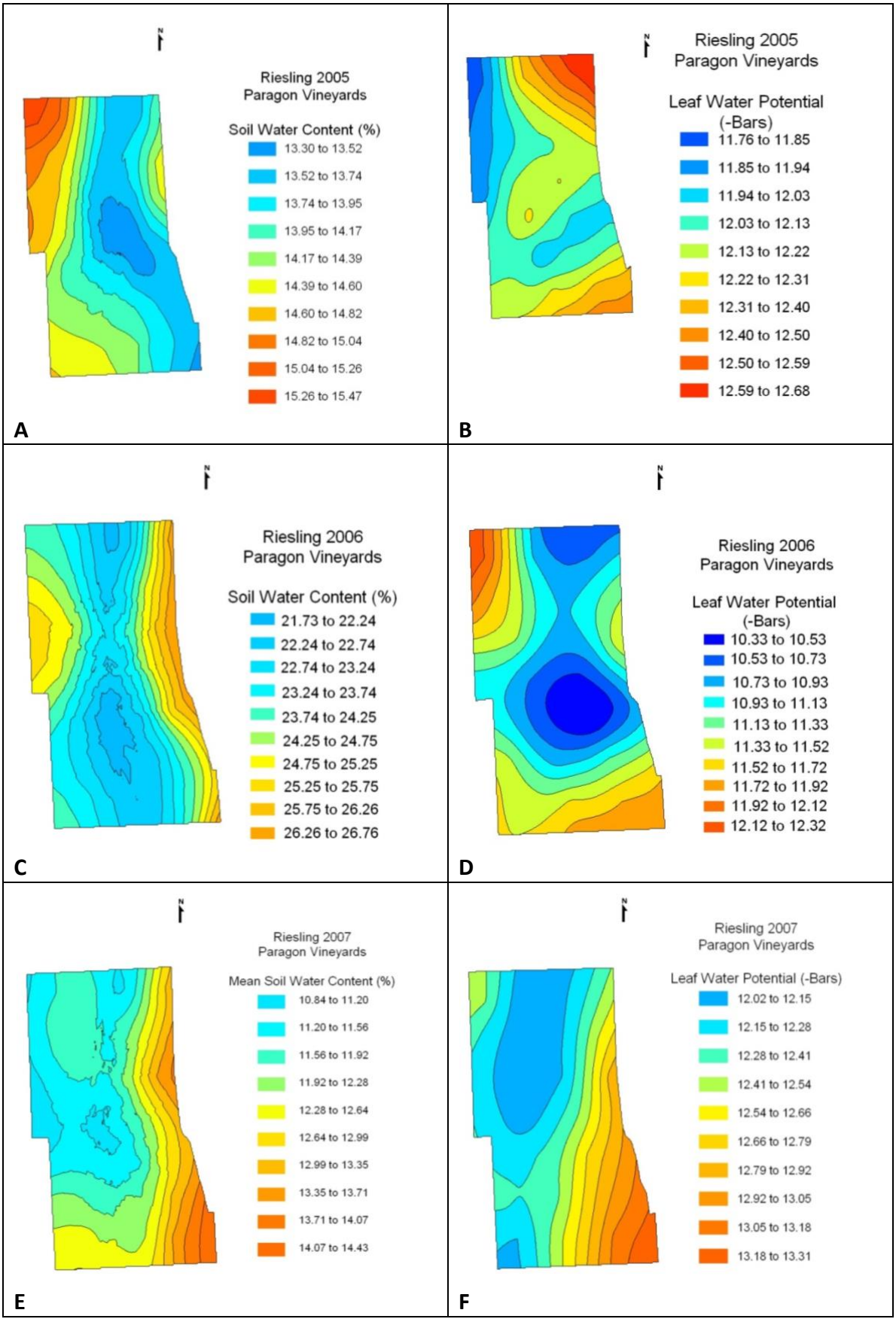


Figure S8. Spatial distribution of soil water content (%) and leaf water potential, Paragon Vineyard, Jordan, ON; Soil water content: A: 2005; C: 2006; E: 2007; Leaf water potential: B: 2005; D: 2006; F: 2007.

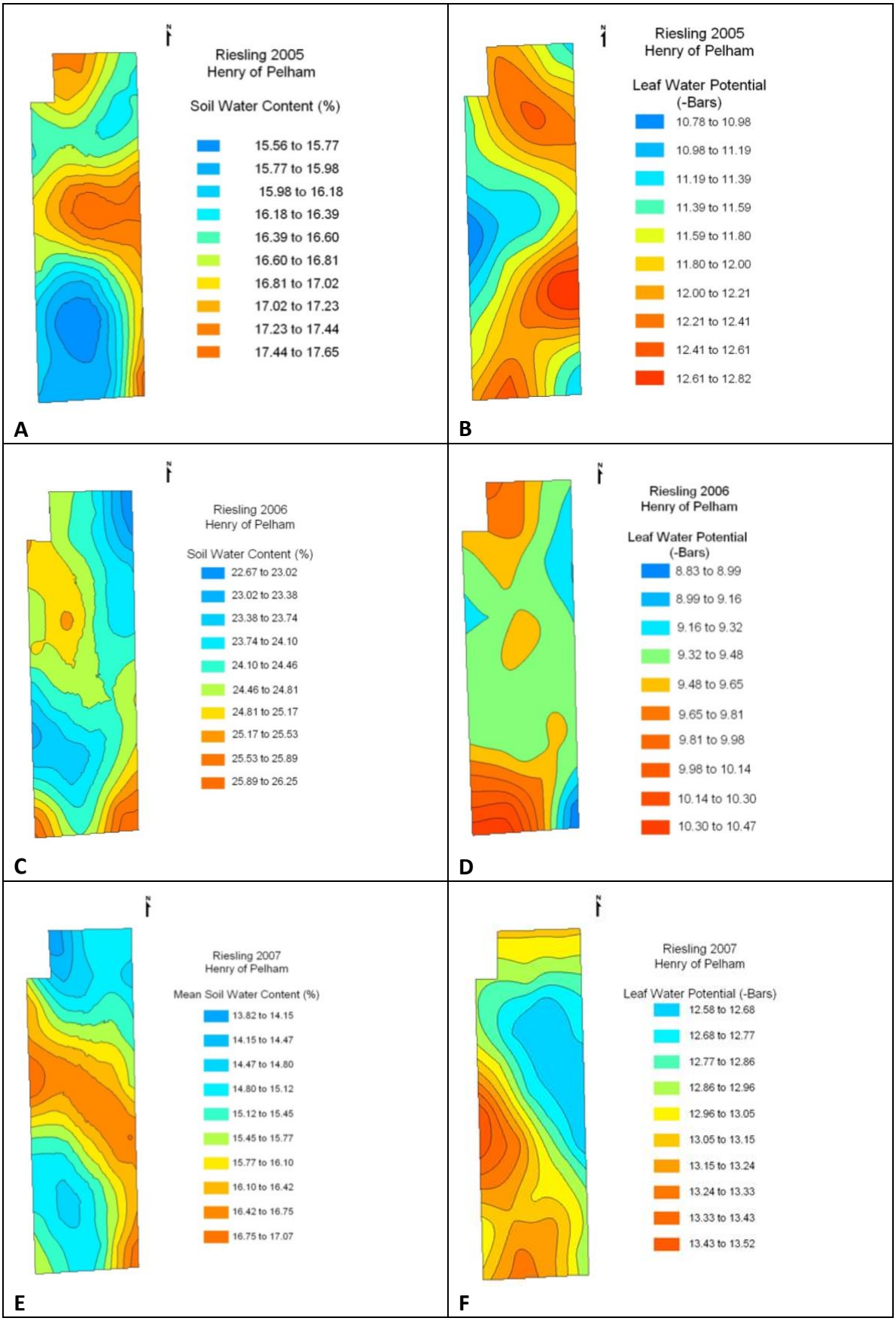


Figure S9. Spatial distribution of soil water content (%) and leaf water potential, Henry of Pelham Vineyard, St. Catharines, ON; Soil water content: A: 2005; C: 2006; E: 2007; Leaf water potential: B: 2005; D: 2006; F: 2007.

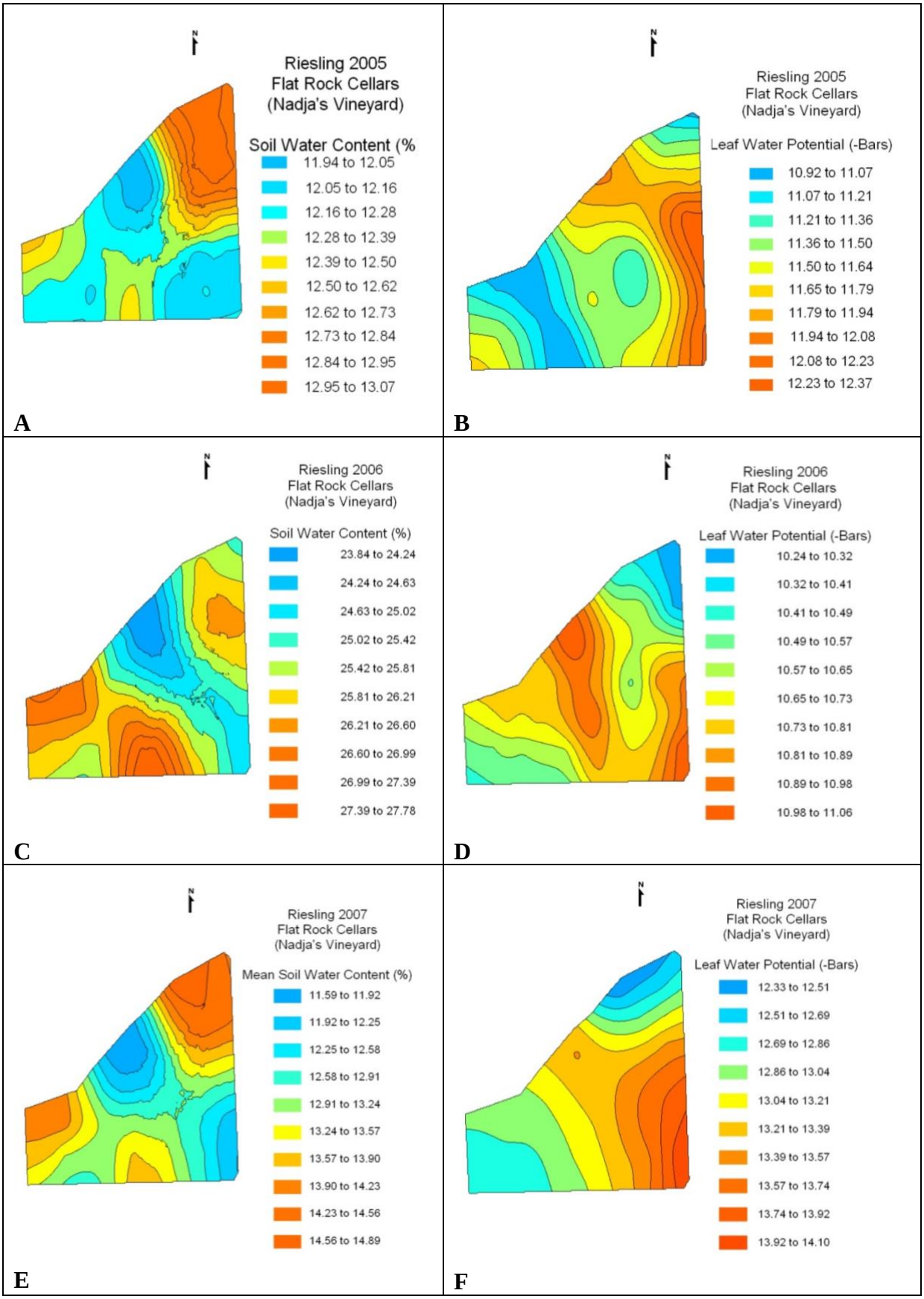


Figure S10. Spatial distribution of soil moisture (%) and leaf water potential, Flat Rock Vineyard, Jordan, ON; Soil moisture: A: 2005; C: 2006; E: 2007; Leaf water potential: B: 2005; D: 2006; F: 2007.

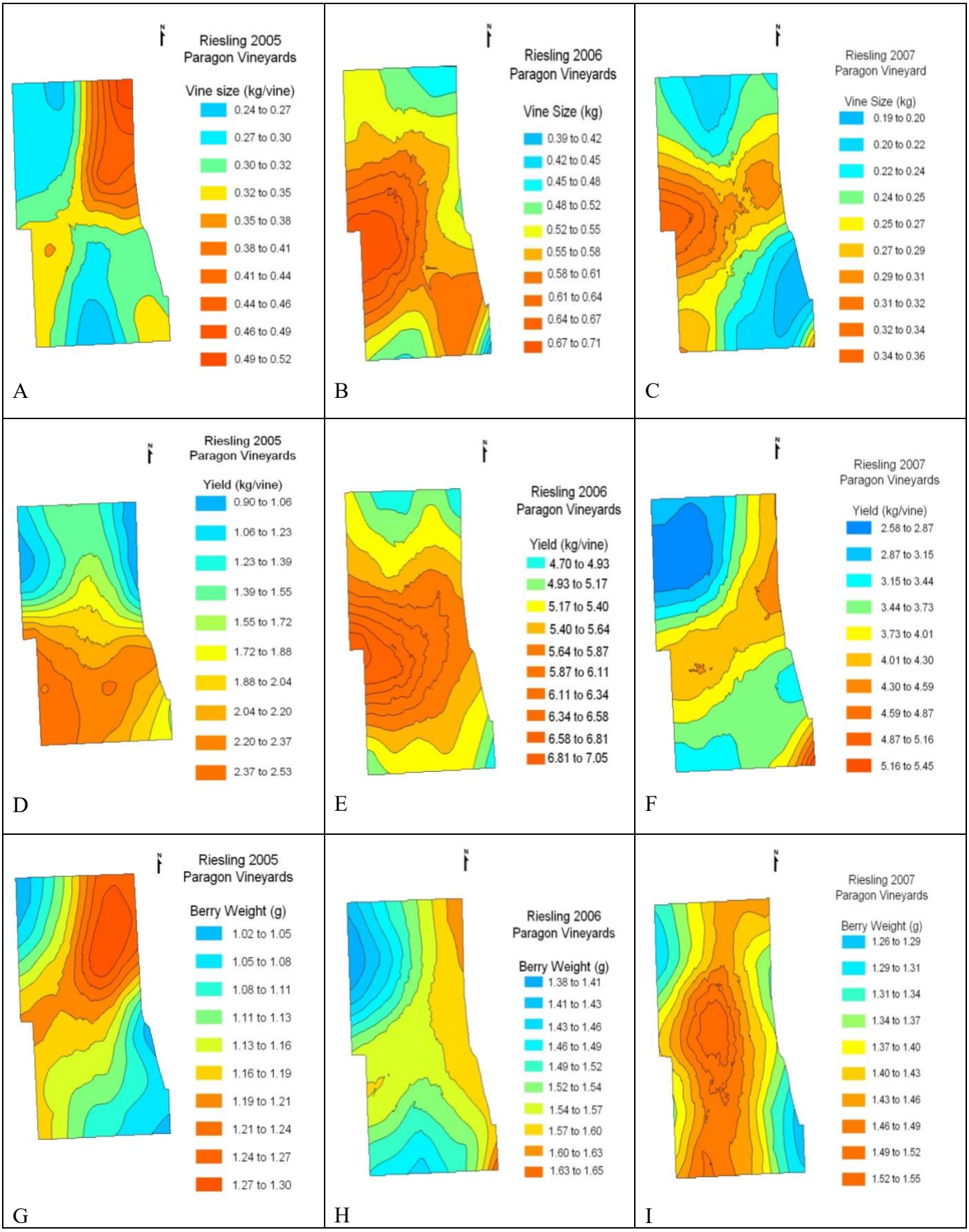


Figure S11. Spatial distribution of vine size (kg), yield per vine (kg) berry weight (g), Paragon Vineyard, Jordan, ON; Vine size: A: 2005; B: 2006; C: 2007; yield per vine: D: 2005; E: 2006; F: 2007; berry weight: G: 2005; H: 2006; I: 2007.

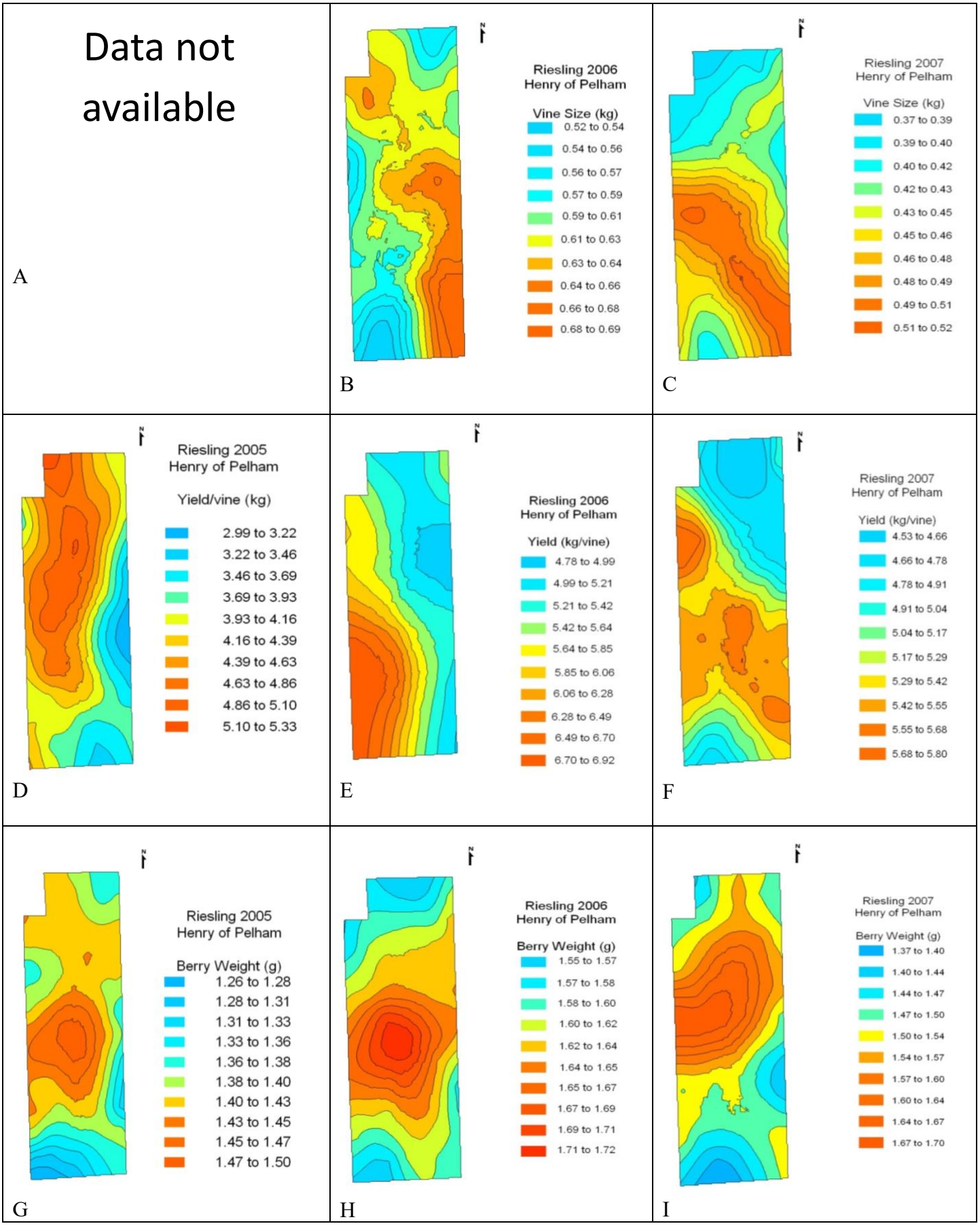


Figure S12. Spatial distribution of vine size (kg), yield per vine (kg) berry weight (g), Henry of Pelham Vineyard, St. Catharines, ON; Vine size: A: 2005; B: 2006; C: 2007; yield per vine: D: 2005; E: 2006; F: 2007; berry weight: G: 2005; H: 2006; I: 2007.

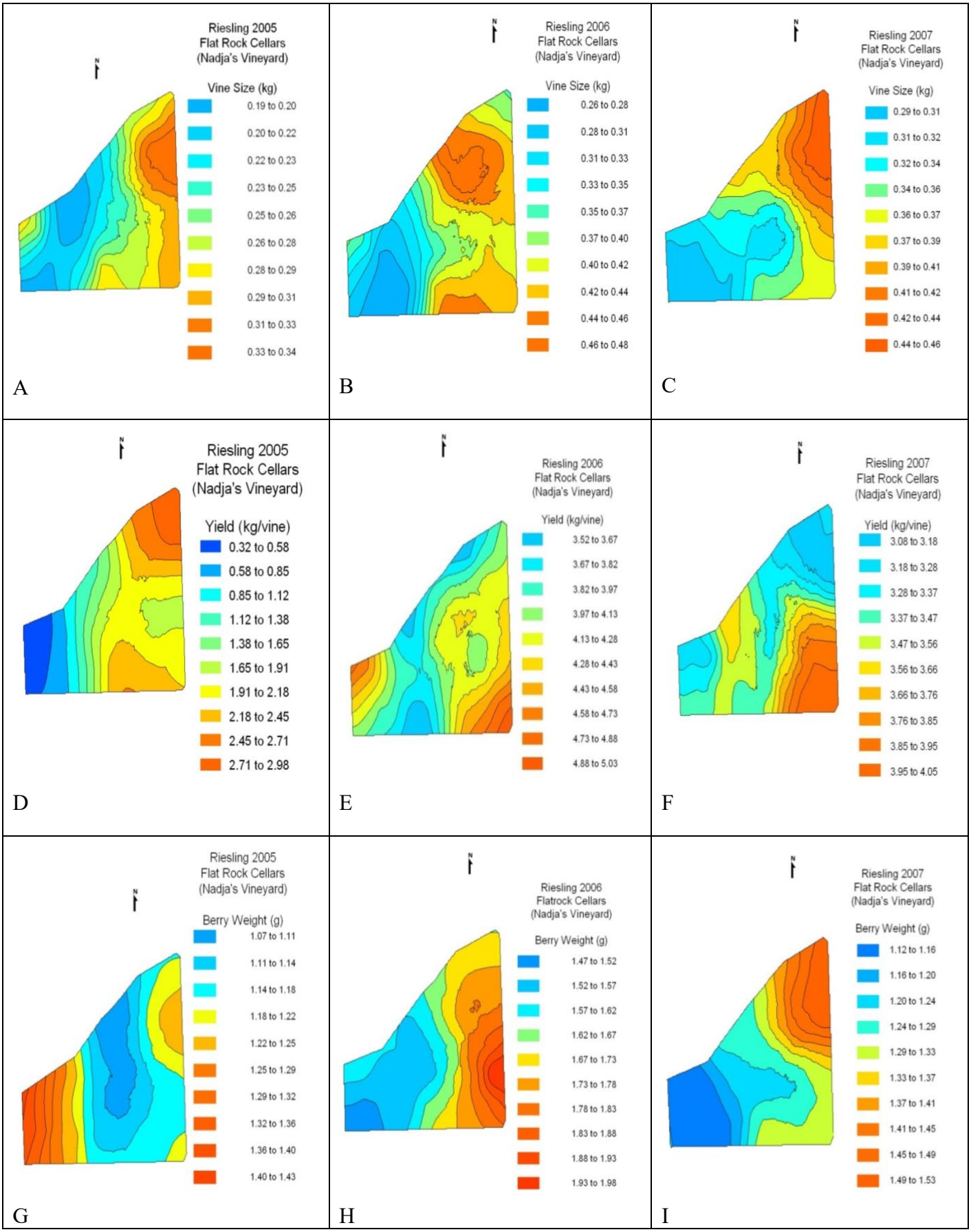
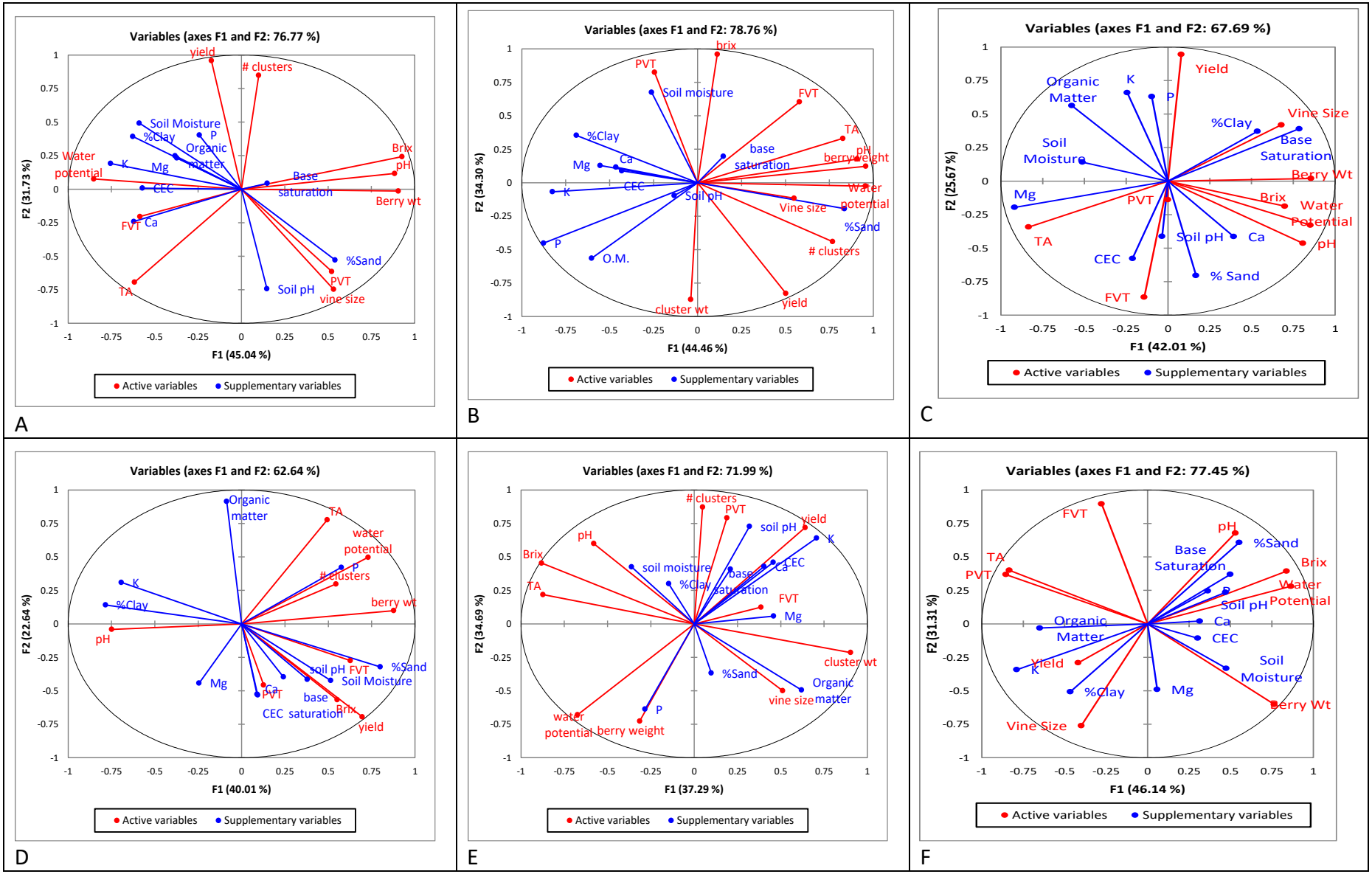


Figure S13. Spatial distribution of vine size (kg), yield per vine (kg) berry weight (g), Flat Rock Vineyard, Jordan, ON; Vine size: A: 2005; B: 2006; C: 2007; yield per vine: D: 2005; E: 2006; F: 2007; berry weight: G: 2005; H: 2006; I: 2007.


Variables (axes F1 and F2: 76.77 %)
yield
clusters
Soil Moisture
%Clay
P
Organic matter
Water potential
K
Mg
CEC
Base saturation
Brix
pH
Berry wt
FVT
Ca
TA
%Sand
Soil pH
PVT
vine size
F1 (45.04 %)
F2 (31.73 %)
Active variables
Supplementary variables
A
Variables (axes F1 and F2: 78.76 %)
brix
PVT
Soil moisture
FVT
%Clay
TA
pH
Mg
Ca
base saturation
berry weight
CEC
K
Water potential
Soil pH
Vine size
%Sand
P
clusters
O.M.
cluster wt
yield
F1 (44.46 %)
F2 (34.30 %)
Active variables
Supplementary variables
B
Variables (axes F1 and F2: 67.69 %)
Yield
Organic Matter
K
P
Vine Size
%Clay
Base Saturation
Soil Moisture
Berry Wt
Mg
PVT
Brix
Water Potential
TA
Soil pH
Ca
pH
CEC
% Sand
FVT
F1 (42.01 %)
F2 (25.67 %)
Active variables
Supplementary variables
C
Variables (axes F1 and F2: 62.64 %)
Organic matter
TA
water potential
P
clusters
K
%Clay
berry wt
pH
soil pH
FVT
%Sand
Soil Moisture
Mg
Ca
PVT
base
Brix
CEC
saturation
yield
F1 (40.01 %)
F2 (22.64 %)
Active variables
Supplementary variables
D
Variables (axes F1 and F2: 71.99 %)
clusters
PVT
yield
soil pH
pH
K
Brix
soil moisture
Ca
CEC
%Clay
base saturation
TA
FVT
Mg
cluster wt
%Sand
Organic matter
vine size
water potential
berry weight
P
F1 (37.29 %)
F2 (34.69 %)
Active variables
Supplementary variables
E
Variables (axes F1 and F2: 77.45 %)
FVT
pH
%Sand
TA
Base Saturation
Brix
PVT
Water Potential
P
Soil pH
Organic Matter
Ca
CEC
Yield
Soil Moisture
K
%Clay
Mg
Berry Wt
Vine Size
F1 (46.14 %)
F2 (31.31 %)
Active variables
Supplementary variables
F

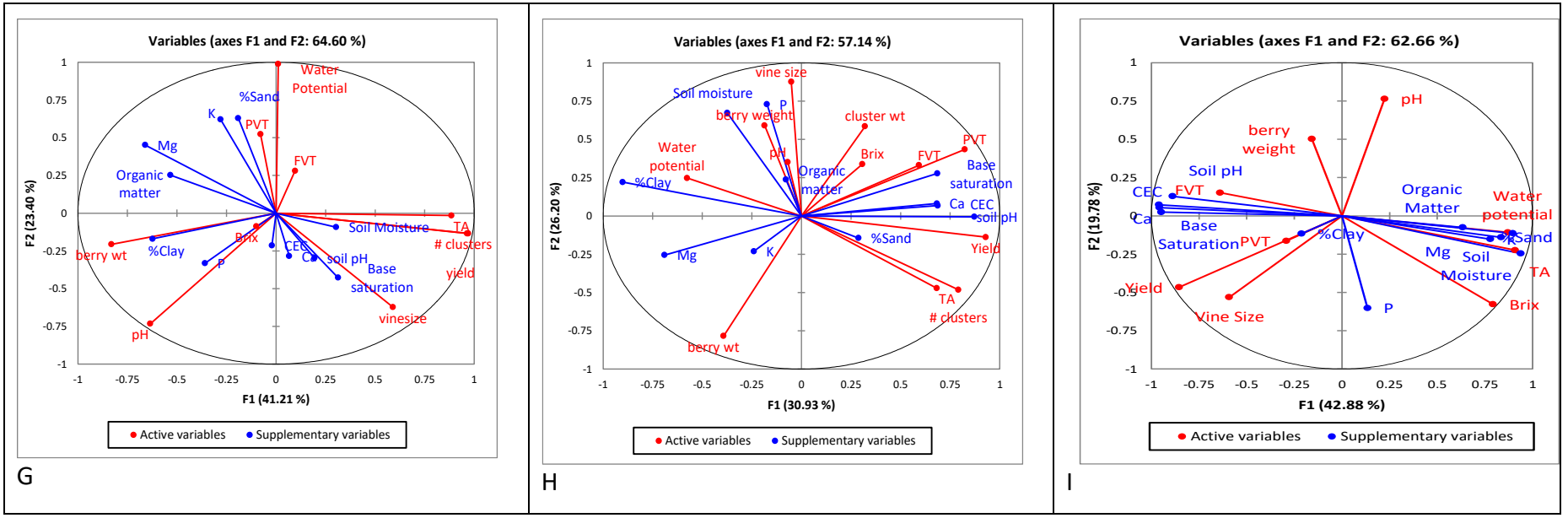


Figure S14. Principal Component Analysis of viticulture and soil variables, 2005-2007. A-C: Paragon Vineyard; D-F: Henry of Pelham Vineyard; G-I: Flat Rock Vineyard.

Table S1. Linear correlations between water status, soil and yield component variables for Glenlake Vineyard, Niagara-on-the-Lake, ON, 2005–2007.

Yield variable	Water status variables		Soil variables									
2005	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	-0.388	-0.196	0.248	-0.214	-0.330	-0.099	-0.288	-0.142	-0.016	-0.089	**-0.583***	0.132
Clusters	**-0.428***	-0.171	0.223	-0.180	-0.279	0.206	**-0.526***	**-0.488***	0.150	0.262	-0.459	0.418
Berry weight	-0.027	-0.042	-0.079	-0.111	-0.083	-0.467	0.192	0.585*	**-0.523***	**-0.496***	-0.024	**-0.494***
Vine size	-0.407	**0.270***	0.096	-0.033	-0.106	-0.309	0.163	-0.101	-0.128	-0.232	-0.232	-0.110
2006	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	-0.09	-0.078	**-0.528***	**0.532***	0.127	-0.235	-0.450	-0.151	-0.072	-0.175	-0.342	-0.061
Clusters	-0.145	-0.184	-0.364	0.362	-0.114	0.160	**-0.750****	-0.211	0.027	0.170	-0.344	0.261
Berry weight	0.314	-0.195	0.318	-0.407	-0.174	0.250	-0.225	**-0.565***	0.031	0.079	-0.234	0.350
Vine size	-0.149	0.001	0.015	-0.415	0.028	-0.303	0.405	0.091	-0.476	-0.365	0.075	-0.195
2007	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	-0.056	-0.274	-0.047	0.025	-0.210	**-0.519***	0.017	0.098	-0.427	**-0.713****	-0.329	-0.363
Clusters	0.002	-0.209	-0.086	0.063	-0.242	-0.344	-0.327	0.078	-0.431	**-0.597***	-0.342	-0.212
Berry weight	0.190	**0.326***	-0.085	-0.205	-0.057	-0.138	0.277	-0.160	-0.158	0.002	0.240	-0.235
Vine size	0.021	0.176	-0.130	-0.432	-0.121	-0.200	0.242	-0.135	-0.478	-0.263	0.342	-0.240

Significant r values at *p<0.05 and **p<0.01. SWC, soil water content; OM, organic matter; CEC, cation exchange capacity; BS, base saturation.

Table S2. Linear correlations between water status, soil and yield component variables for Château des Charmes Vineyard, St. Davids, ON, 2005–2007.

Yield variable	Water status variables		Soil variables									
2005	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	-0.328	**0.248***	-0.169	0.197	**-0.528***	0.032	0.031	-0.390	-0.412	0.315	0.243	0.421
Clusters	-0.206	0.210	-0.078	0.133	-0.416	-0.142	0.106	-0.293	-0.416	0.120	0.028	0.283
Berry weight	-0.392	0.057	-0.042	-0.001	0.262	-0.165	0.071	0.010	0.317	-0.181	-0.149	-0.211
Vine size	**-0.430***	0.078	0.127	-0.043	0.213	-0.108	**0.445***	-0.102	-0.156	-0.102	-0.136	0.05
2006	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	***pH***	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	**-0.515***	0.066	-0.188	0.174	0.071	0.167	-0.088	0.344	0.212	0.077	-0.089	0.094
Clusters	-0.317	0.151	-0.428	0.432	-0.136	0.123	-0.319	-0.023	0.373	0.143	-0.009	0.031
Berry weight	-0.109	0.108	0.298	-0.327	0.183	**-0.594***	0.233	0.125	0.419	**-0.633****	-0.221	0.023
Vine size	0.145	0.207	0.278	-0.395	**0.491***	-0.097	0.282	0.047	-0.163	-0.172	-0.104	0.065
2007	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS(% Ca)**
Yield/vine	0.018	0.067	0.020	0.049	0.263	-0.198	0.185	0.197	0.118	-0.225	-0.212	-0.257
Clusters	**-0.449***	0.129	-0.109	0.012	0.018	-0.084	0.143	0.343	-0.113	-0.102	-0.096	-0.178
Berry weight	0.332	**0.282***	0.089	-0.099	0.005	-0.371	0.011	-0.099	0.287	-0.370	-0.373	-0.269
Vine size	**0.455***	**-0.262***	**0.604***	**-0.687***	0.205	-0.313	0.250	-0.137	-0.219	-0.241	-0.277	-0.027

Significant r values at *p<0.05 and **p<0.01. SWC, soil water content; OM, organic matter; CEC, cation exchange capacity; BS, base saturation.

Table S3. Linear correlations between water status, soil and yield component variables for Paragon Vineyard, Jordan, ON, 2005–2007.

Yield variable	Water status variables		Soil variables									
2005	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	-0.160	-0.088	0.231	-0.434	-0.041	0.149	-0.137	-0.275	-0.093	-0.147	-0.107	-0.012
Clusters	**-0.459***	-0.152	0.138	-0.332	-0.075	0.107	-0.044	-0.315	-0.053	-0.084	-0.094	0.139
Berry weight	0.099	-0.019	0.370	0.082	**-0.766****	0.239	-0.394	**-0.597****	-0.148	0.159	0.060	0.286
Vine size	-0.108	-0.035	0.286	-0.246	-0.281	0.071	**-0.451***	-0.238	-0.265	-0.170	-0.136	-0.170
2006	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	-0.359	-0.137	0.366	-0.416	0.062	-0.122	0.054	-0.026	-0.385	-0.233	-0.270	0.150
Clusters	-0.242	-0.091	0.236	-0.211	-0.055	0.188	-0.045	-0.118	-0.221	0.081	0.036	0.280
Berry weight	**-0.443***	0.132	**0.453***	-0.165	**-0.646****	-0.286	**-0.593****	-0.431	-0.441	-0.350	-0.304	0.126
Vine size	-0.199	-0.148	0.064	-0.149	-0.026	-0.146	-0.222	-0.033	-0.225	-0.212	-0.175	-0.086
2007	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	0.064	0.004	0.191	-0.223	-0.290	-0.314	-0.230	-0.109	-0.397	-0.308	-0.263	0.207
Clusters	0.245	0.146	0.101	-0.017	-0.420	-0.262	-0.252	-0.249	-0.195	-0.274	-0.288	0.336
Berry weight	**0.538***	-0.197	0.233	-0.092	-0.409	0.235	-0.122	-0.300	-0.273	0.153	0.079	**0.470***
Vine size	0.225	0.013	0.147	-0.194	-0.162	0.025	-0.197	-0.115	-0.339	-0.027	-0.025	0.316

Significant r values at *p<0.05 and **p<0.01. SWC, soil water content; OM, organic matter; CEC, cation exchange capacity; BS, base saturation.

Table S4. Linear correlations between water status, soil and yield component variables for Henry of Pelham, St. Catharines, ON, 2005–2007.*

Yield variable	Water status variables		Soil variables									
2005	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	-0.051	-0.006	-0.152	-0.023	0.036	-0.111	0.039	0.233	-0.063	-0.118	-0.091	-0.077
Clusters	0.008	-0.044	-0.057	-0.131	-0.025	-0.121	0.065	0.137	-0.090	-0.110	-0.088	-0.088
Berry weight	-0.053	0.144	0.287	-0.248	-0.284	0.345	-0.218	0.006	-0.190	0.180	0.167	0.231
Vine size	——	——	——	——	——	——	——	——	——	——	——	——
2006	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	-0.184	-0.119	-0.152	0.040	-0.145	-0.160	**-0.587***	0.157	0.217	-0.207	-0.163	-0.284
Clusters	-0.371	-0.031	-0.088	0.059	-0.230	-0.285	-0.337	0.021	0.333	-0.328	-0.287	-0.427
Berry weight	0.151	-0.089	0.209	-0.329	0.370	-0.077	-0.254	-0.383	-0.434	-0.182	-0.209	-0.003
Vine size	-0.006	0.018	0.312	-0.246	0.061	0.135	0.054	-0.049	-0.323	-0.038	-0.066	0.165
2007	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	0.399	**0.246***	0.171	-0.108	0.299	0.205	-0.185	-0.013	-0.170	0.323	0.292	0.387
Clusters	0.214	0.091	0.228	0.097	0.273	0.085	0.079	0.098	-0.155	0.272	0.225	0.312
Berry weight	**0.643****	**0.367****	0.216	-0.375	-0.046	0.204	-0.022	-0.315	-0.296	0.000	-0.002	0.149
Vine size	0.039	**0.223***	0.042	0.005	0.330	0.287	-0.179	0.158	-0.349	0.191	0.168	0.284

Significant r values at *p<0.05 and **p<0.01. SWC, soil water content; OM, organic matter; CEC, cation exchange capacity; BS, base saturation.

Table S5. Linear correlations between water status, soil and yield component variables for Myers Vineyard, Vineland, ON, 2005–2007.

Yield variable	Water status variables		Soil variables									
2005	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	-0.329	**-0.311****	0.226	0.270	**-0.531***	-0.328	-0.447	-0.164	0.061	**-0.510***	-0.051	-0.400
Clusters	-0.234	**-0.285***	0.157	0.164	**-0.475***	-0.431	-0.422	-0.203	-0.165	**-0.637***	-0.154	-0.441
Berry weight	0.192	0.155	0.069	0.064	0.249	0.148	0.189	0.188	0.269	0.367	0.114	0.208
Vine size	**0.642****	-0.054	-0.202	-0.106	**0.496***	0.202	0.386	0.216	0.216	**0.513***	0.402	0.146
2006	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS %) Ca)**
Yield/vine	-0.114	0.097	0.281	-0.438	-0.022	0.368	-0.023	0.065	-0.249	-0.256	-0.180	0.427
Clusters	-0.087	0.174	0.403	-0.449	0.222	0.267	-0.032	0.414	-0.224	0.170	-0.012	0.177
Berry weight	-0.013	**0.262***	0.302	**-0.486***	0.060	**0.541***	0.313	0.075	-0.134	**0.497***	-0.106	**0.578***
Vine size	-0.293	0.151	**0.602****	-0.458	**0.646****	0.062	**0.566***	0.191	-0.105	0.408	0.362	0.111
2007	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS %) Ca)**
Yield/vine	-0.070	0.091	0.221	-0.092	0.141	-0.087	0.207	0.250	0.218	-0.049	0.176	-0.167
Clusters	-0.309	0.081	0.039	0.128	-0.119	-0.078	0.284	0.032	0.119	-0.027	-0.010	0.013
Berry weight	**0.756****	0.198	-0.136	-0.076	0.295	0.257	0.257	0.373	0.166	0.410	0.242	0.121
Vine size	0.126	0.004	**0.538***	-0.311	**0.604****	0.071	**0.566***	0.324	-0.052	0.363	0.380	0.022

Significant r values at *p<0.05 and **p<0.01. SWC, soil water content; OM, organic matter; CEC, cation exchange capacity; BS, base saturation.

Table S6. Linear correlations between water status, soil and yield component variables for Flat Rock Cellars, Jordan, ON, 2005–2007.

Yield variable	Water status variables		Soil variables									
2005	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	-0.328	**0.248***	-0.169	0.197	**-0.528***	0.032	0.031	-0.390	-0.412	0.315	0.243	0.421
Clusters	-0.206	0.210	-0.078	0.133	-0.416	-0.142	0.106	-0.293	-0.416	0.120	0.028	0.283
Berry weight	-0.392	0.057	-0.042	-0.001	0.262	-0.165	0.071	0.01	0.317	-0.181	-0.149	-0.211
Vine size	**-0.430***	0.078	0.127	-0.043	0.213	-0.108	0.445	-0.102	-0.156	-0.102	-0.136	0.050
2006	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	**-0.487***	0.100	-0.019	0.118	-0.183	0.243	-0.335	-0.098	0.172	0.183	0.240	0.032
Clusters	-0.008	0.111	-0.229	0.313	-0.133	0.060	-0.409	0.061	**0.524***	0.060	0.157	-0.207
Berry weight	0.047	-0.030	0.126	0.031	-0.164	-0.162	0.083	-0.141	-0.166	-0.091	-0.128	0.057
Vine size	-0.091	0.166	0.237	-0.110	0.037	0.067	0.368	-0.083	-0.320	0.117	0.082	0.224
2007	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	-0.114	0.008	0.069	-0.238	0.375	0.062	**0.453***	0.149	-0.234	0.077	0.049	0.099
Clusters	-0.232	-0.001	-0.112	-0.070	0.031	0.206	0.199	-0.126	-0.108	0.185	0.170	0.173
Berry weight	0.280	0.132	0.036	-0.092	-0.056	-0.257	0.128	-0.121	-0.341	-0.116	-0.197	0.077
Vine size	0.002	0.116	0.065	0.029	-0.093	-0.210	0.108	-0.281	-0.188	-0.169	-0.224	0.040

Significant r values at *p<0.05 and **p<0.01. SWC, soil water content; OM, organic matter; CEC, cation exchange capacity; BS, base saturation.

Table S7. Linear correlations between water status, soil and yield component variables for Cave Spring Vineyard, Beamsville, ON, 2005–2007.

Yield variable	Water status variables		Soil variables									
2005	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	-0.069	-0.041	0.181	-0.240	**0.517***	0.218	0.357	0.301	-0.250	-0.022	-0.016	0.009
Clusters	-0.243	-0.067	-0.143	-0.019	0.424	-0.383	0.198	0.350	0.155	-0.393	-0.370	-0.429
Berry weight	0.335	**0.276***	0.375	-0.464	**0.688****	-0.186	**0.614****	0.243	-0.115	-0.189	-0.186	-0.153
Vine size	0.071	0.059	0.052	-0.133	0.339	0.113	0.213	0.082	-0.139	0.080	0.103	0.124
2006	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	0.110	0.074	0.050	0.201	-0.089	-0.028	**0.473***	0.119	-0.030	0.189	0.461	-0.122
Clusters	0.005	0.082	-0.213	0.179	-0.223	-0.028	0.442	-0.064	0.099	0.124	0.207	-0.046
Berry weight	0.017	0.000	-0.076	-0.109	0.112	-0.190	0.445	0.227	-0.393	-0.062	0.151	-0.233
Vine size	-0.038	0.102	0.037	-0.135	0.287	-0.278	-0.129	0.282	-0.028	-0.329	-0.352	-0.093
2007	**Leaf ψ**	**SWC**	**Sand**	**Clay**	**OM**	**pH**	**P**	**K**	**Mg**	**Ca**	**CEC**	**BS (% Ca)**
Yield/vine	-0.216	**-0.253***	0.072	-0.228	0.419	-0.293	0.253	0.344	**-0.478***	-0.126	0.128	-0.237
Clusters	-0.004	**-0.247***	0.065	-0.384	0.309	-0.064	0.278	0.337	-0.251	-0.177	-0.100	-0.181
Berry weight	-0.025	0.102	-0.423	-0.072	0.082	-0.236	0.036	0.189	-0.056	-0.248	-0.319	-0.107
Vine size	-0.084	-0.095	-0.225	0.036	0.061	-0.246	-0.047	0.215	-0.289	-0.134	-0.170	-0.004

Significant r values at *p<0.05 and **p<0.01. SWC, soil water content; OM, organic matter; CEC, cation exchange capacity; BS, base saturation.