

TABLE 93. Comparisons of soil color (mostly gley or mostly not gley) in the upper 20 cm in four vegetation types by χ^2 analysis and exact probabilities in 2×2 contingency tables from simple random sampling design surveys

| Vegetation Comparisons | No. of points | χ^2 or p^a | Results | |
|--|---------------|-------------------|------------------------|-------------|
| | | | Significance | r_{tet}^b |
| <i>I. pseudacorus</i> areas (marsh and transition) with similar but non- <i>Iris</i> areas | 39 | 2.438 | not significant at 0.1 | + 0.44 |
| Marshes with and without <i>I. pseudacorus</i> | 17 | 0.092 | not significant at 0.1 | + 0.16 |
| Swamp-marsh transitions with and without <i>I. pseudacorus</i> | 22 | $p = 0.074$ | significant at 0.07 | + 0.65 |
| Marshes with the swamp-marsh transitions | 39 | 1.010 | not significant at 0.1 | + 0.30 |

^a p is exact probability; transition *Iris* is associated with gley.

^b r_{tet} is tetrachoric coefficient of correlation.