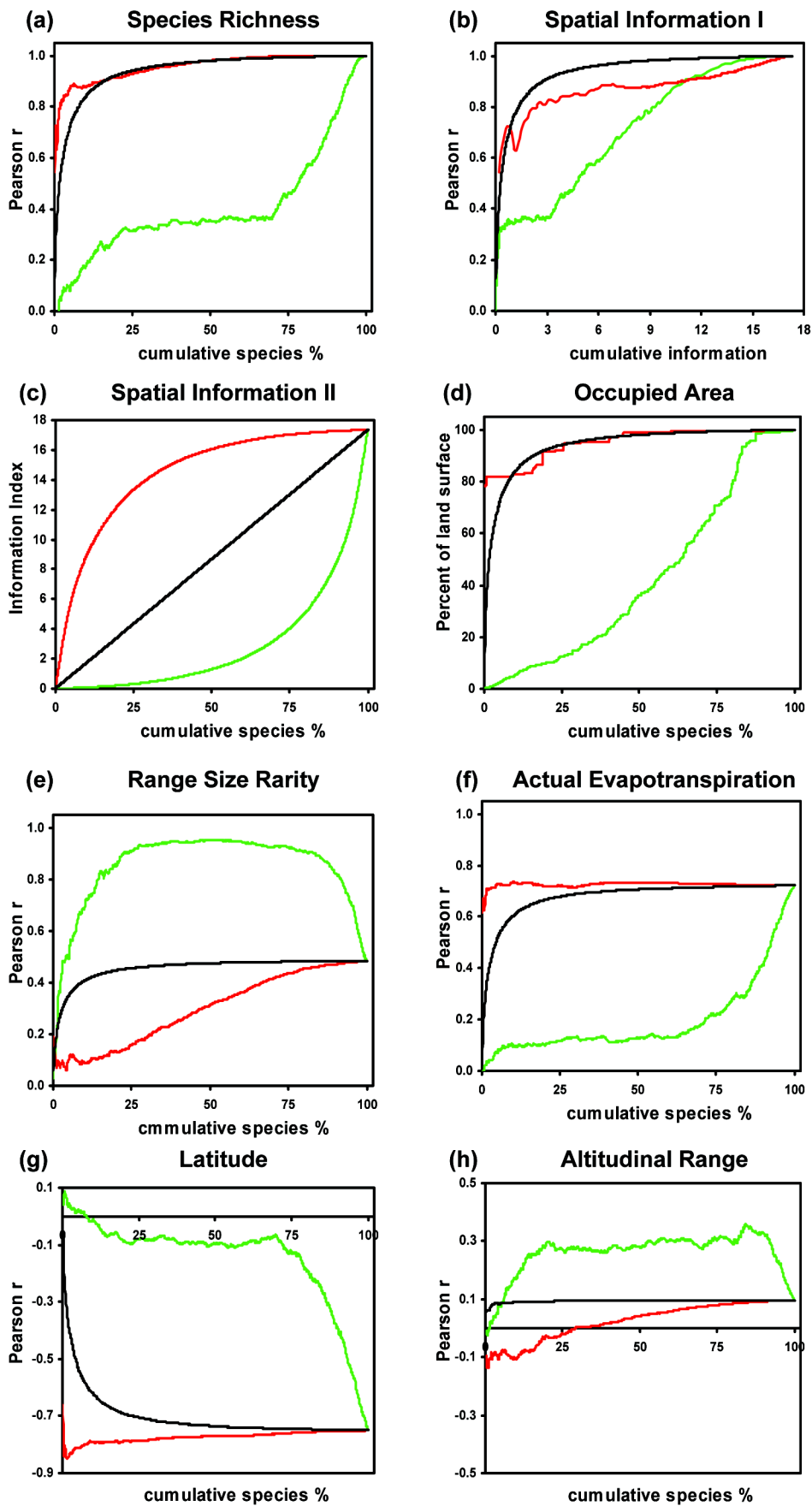


## Appendix

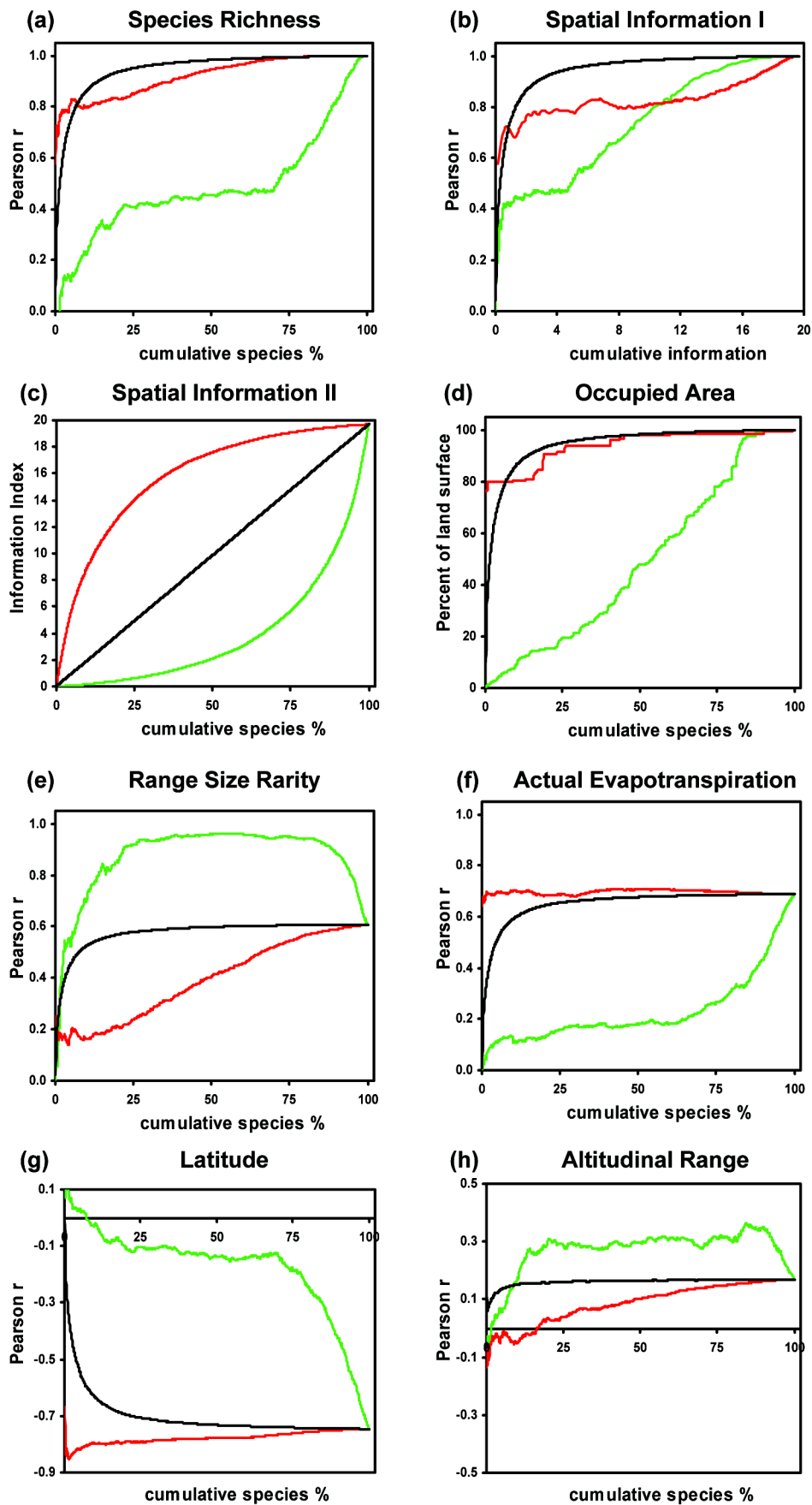
Correlations of cumulative species richness patterns of three different types of species sequences at five different grain sizes of 1°, 2°, 3°, 4°, and 5°. Species sequences were produced by ranking species according to their range size in ascending (small-to-large, green colour), descending (large-to-small, red) and random (2000 runs; black) order.

(a) Correlations between cumulative and overall species richness patterns plotted against the proportion of species. (b) Correlations between cumulative and overall species richness patterns plotted against the cumulative amount of spatial information. (c) The cumulative volume of spatial information at each step plotted against the portion of species in the sequence. (d) Portion of land surface covered by species sequences at each step. (e) Correlations between cumulative species richness patterns and range size rarity. Correlations between cumulative species richness patterns and (f) actual evapotranspiration, (g) latitude and (h) altitudinal range (only correlations of selected environmental predictors are shown).

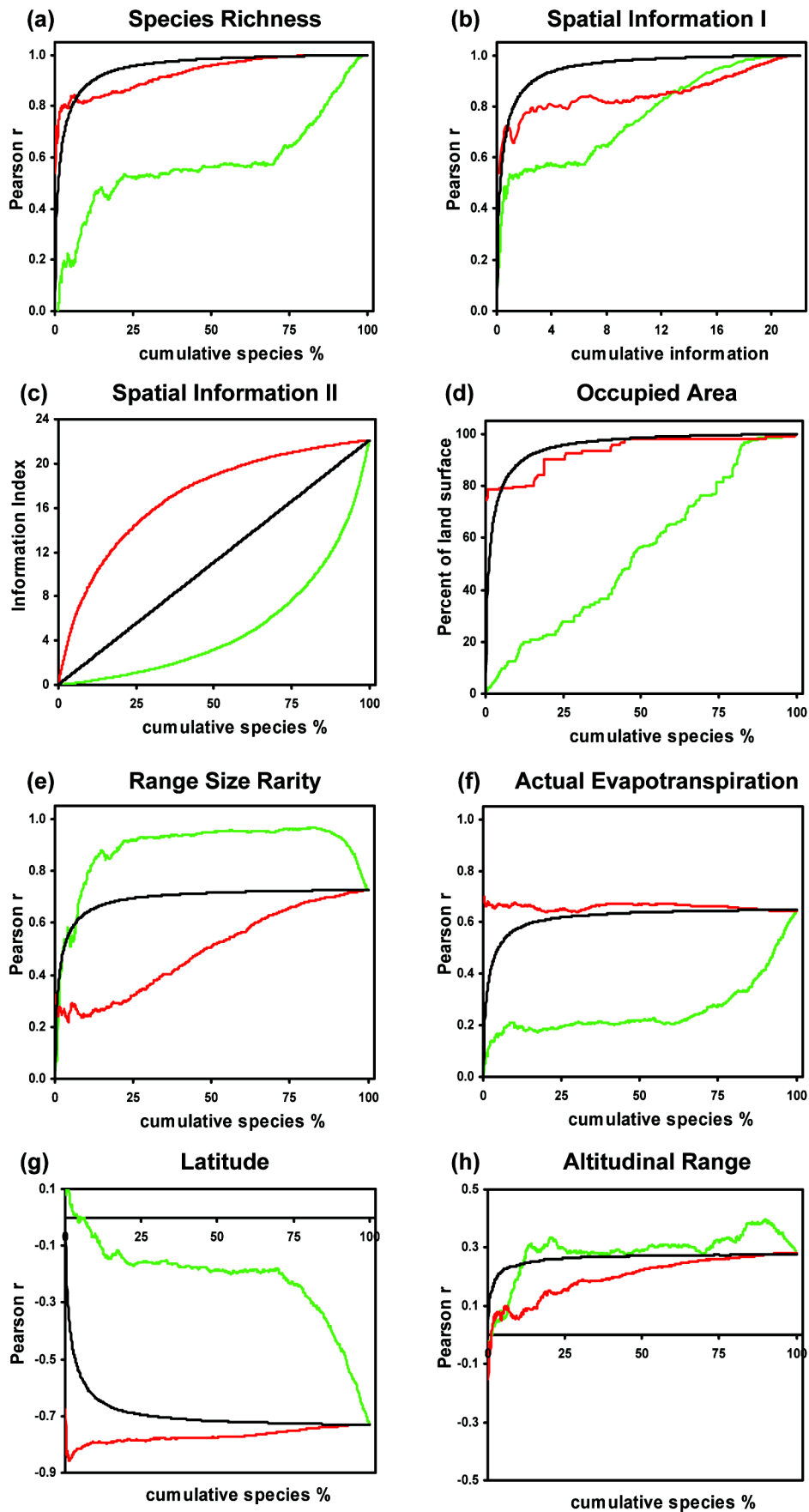
# 1° x 1° scale



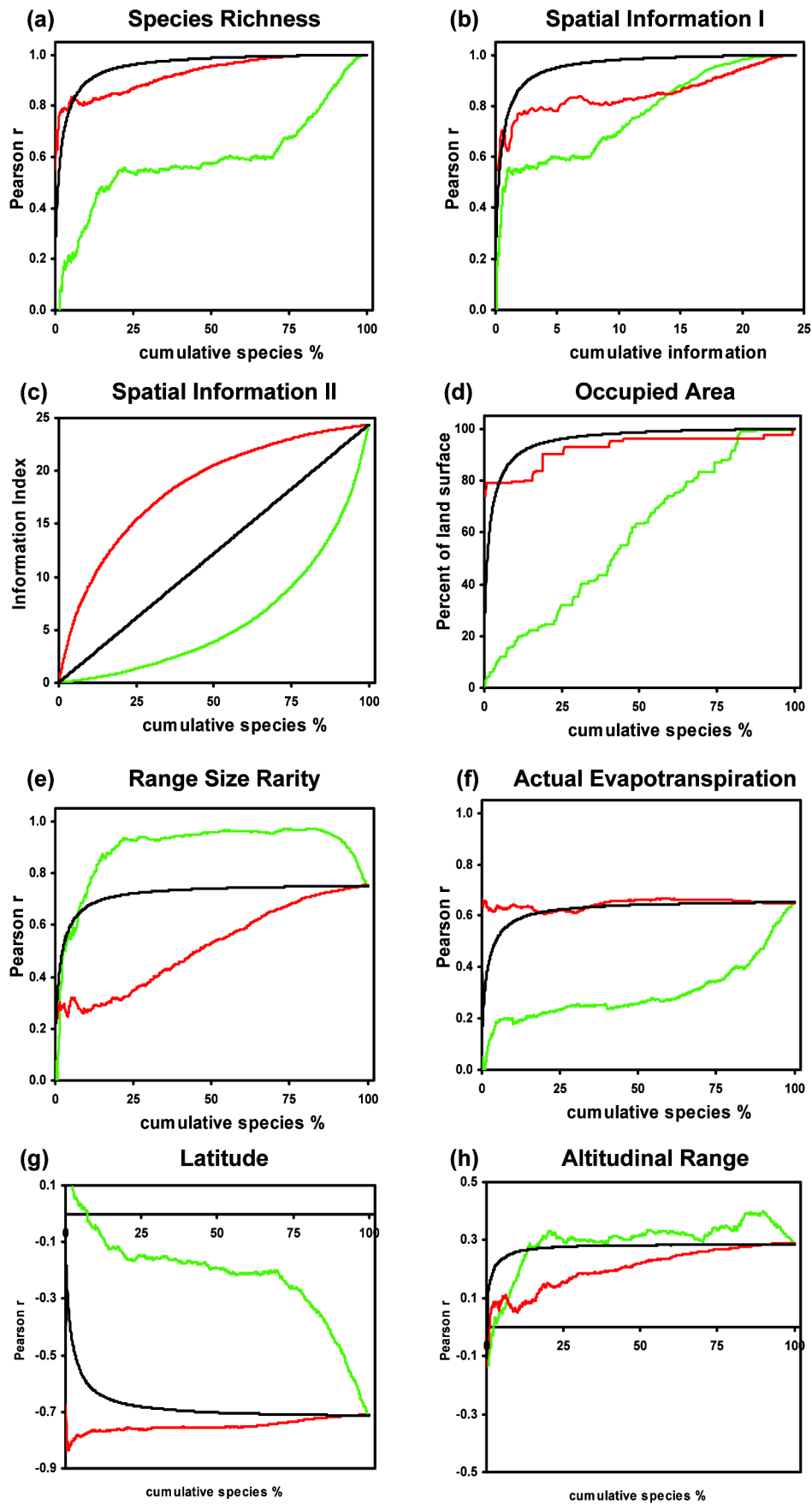
## 2° x 2° scale



## 3° x 3° scale



## 4° x 4° scale



## 5° x 5° scale

