

The following supplement accompanies the article

Spatial niche differentiation and coexistence at the edge: co-occurrence distribution patterns in *Scurria* limpets

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Supplement 1.

Mark-recapture method for *Scurria* identification in the field. Juveniles and adult individuals of *S. viridula* can be easily mistaken with *S. zebrina* according to their similar morphology (Espoz et al. 2004). To improve the identification in the field, we marked juvenile specimens (from 0.5 to 1.4 cm) of both species and monitored growth of individuals until they reached the sub-adult stage (8 to 12 mo). Fifty individuals were marked with numbered bee tags glued directly onto their shells. In this procedure, individuals were not picked up from the substrate. We followed detailed morphological description reported by Espoz et al. (2004) to differentiate both juveniles and adults of each species. The mark-recapture procedure was conducted in Guanaqueros and Punta Talca from April 2010 to May 2011. Despite *S. viridula* having clear ontogenetic changes in the ornamentation and external structure of the shell (Figs. S1.1c and S.1.2b) compared with *S. zebrina*, adult individuals of these species were easily differentiated in the field.

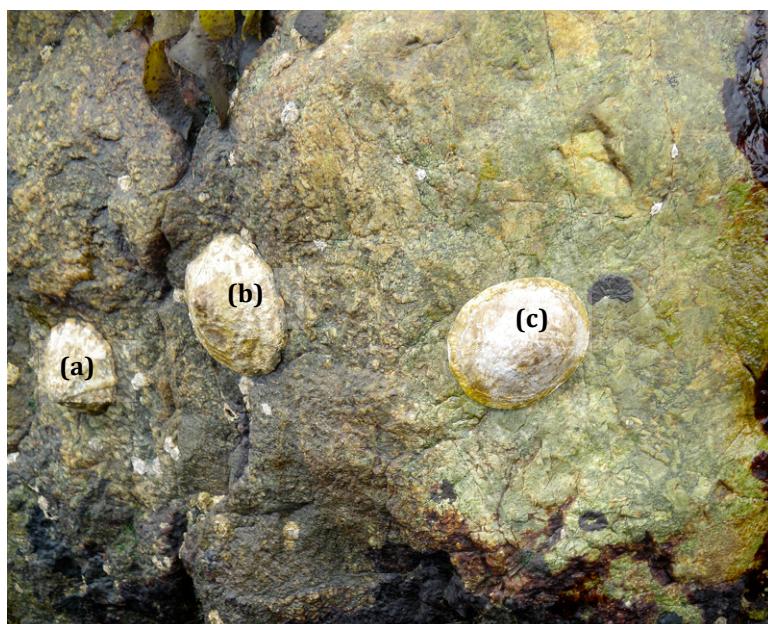


Fig. S1.1. Adult individuals of (a,b) *Scurria zebrina* and (c) *S. viridula* inhabiting the same platform at the high intertidal level (1.5 m above mean low water level)



Fig. S1.2. Juvenile individuals of (a) *Scurria zebrina* and (b) *S. viridula* recorded at the high intertidal level at Guanaqueros (1.5 to 2.0 m above mean low water level). Note numbered bee tags (3 mm diameter) glued onto the shell of both species

LITERATURE CITED

Espoz C, Lindberg DR, Castilla JC, Simison BW (2004) Los patelogastrópodos intermareales de Chile y Perú. Rev Chil Hist Nat 77:257–283

Supplement 2

Habitat spatial distribution. Mid-high intertidal habitats at the study sites were characterized by areas of bare rock, interspersed by clumps of *Mazzaella laminarioides*, which was absent at Guanaqueros, and patches of chthamalid barnacles (see Fig. 2b, main text). For the corticated alga *M. laminarioides*, significant autocorrelation estimates (Moran's I) based on presence-absence data (i.e. indicator correlograms) were observed at short distance classes in Limarí and Punta Talca (see black square and triangle, Fig. S2.1a), indicating a patchy distribution pattern. Global autocorrelation was non-significant for Huettelauquén across all distance classes (Fig. S2.1a). Correlograms for bare rock showed strongly positive and significant autocorrelation estimates that declined from shorter to longer distances classes (30 to 150 cm). These autocorrelation structures indicated a gradient in the distribution pattern of bare rock in Guanaqueros and a more patchy distribution at Huettelauquén, where significant autocorrelation estimates were restricted to shorter distance classes (see ● and ♦, Fig. S2.1b). For the other study sites (Limarí and Punta Talca), correlograms were not significant at any distance class, suggesting a pattern of random distribution of bare rock (see □ and Δ, Fig. S2.1b).

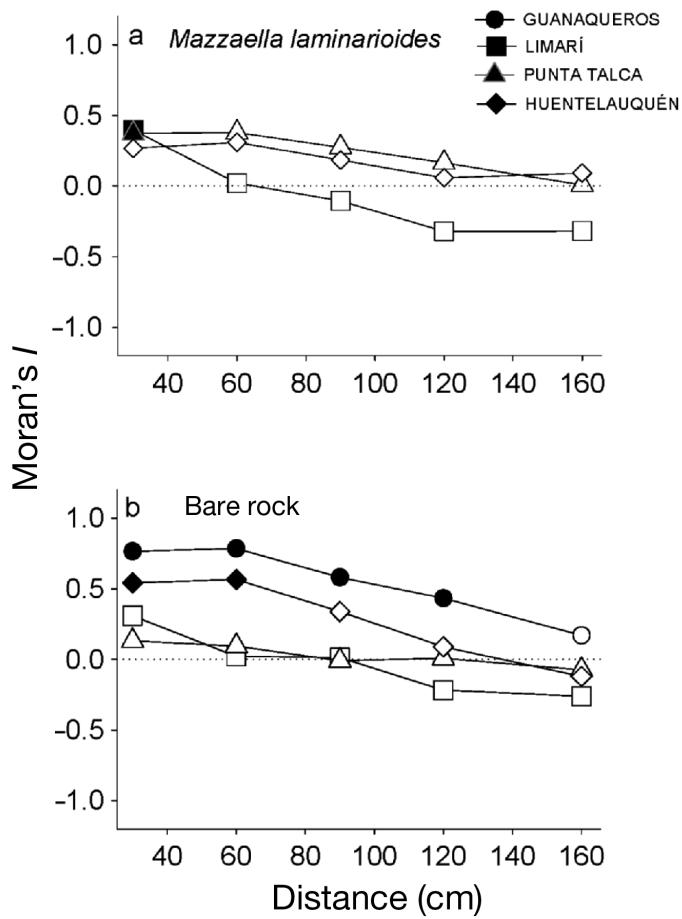


Fig. S2.1. Moran's I spatial correlograms based on binary (presence-absence) data for the 2 most important habitat types recorded in the study sites: (a) the corticated alga *Mazzaella laminariooides* and (b) bare rock. Symbols: solid = significant correlation, and open = indicate non-significant correlation. Note that *M. laminariooides* was absent in Guanaqueros and, thus, the analysis was not conducted for this site