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TITLE: Use of larval supply in benthic ecology:testing correlations between larval supply and larval settlement

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ABSTRACT:

MEPS Marine Ecology Progress Series Contact the journal Facebook Twitter RSS Mailing List Subscribe to our mailing list via Mailchimp HomeLatest VolumeAbout the JournalEditorsTheme Sections MEPS 124:301-305 (1995) - doi:10.3354/meps124301 Use of larval supply in benthic ecology: testing correlations between larval supply and larval settlement Miron G, Boudreau B, Bourget E Conceptual models in marine benthic ecology have been reinforced with the use of larval recruitment as a key factor to predict fluctuations in the abundance and distribution of sessile adult populations. In turn, larval recruitment is determined using various indicators of planktonic larval abundance (larval supply). Based on plankton and settlement data collected over an entire settlement period of the barnacle *Semibalanus balanoides*, we explore the variability in the strength of the relationships between the abundance of newly settled individuals sampled daily at 3 shore levels and the daily larval abundance at 3 different depths over a 10 d study period. The best correlation was obtained between the number of larvae collected near the bottom and the number of spat sampled in the low intertidal. More than 75% of the variability in the abundance of newly settled spat in the lower intertidal was explained by variations in the larval abundance near the bottom. Larval abundance integrated over the entire water column explained ~50% of the variability in low shore settlement, but failed to be significant. All other comparisons showed a lack of correlations. Our approach demonstrates that indicators of larval supply must be carefully and solidly documented to reflect the relationships between abundance of competent larvae, settlement intensity, and subsequently recruitment. Larval supply . Larval settlement . Predictions . Sampling . Barnacles . *Semibalanus balanoides* Full text in pdf format PreviousNextExport citation RSS - Facebook - Tweet - linkedIn Cited by Published in MEPS Vol. 124. Publication date: August 10, 1995 Print ISSN:0171-8630; Online ISSN:1616-1599 Copyright © 1995 Inter-Research.

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CONCEPTS: ['Benthic zone', 'Abundance (ecology)', 'Larva', 'Intertidal zone', 'Biology', 'Ecology', 'Plankton']