|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Data analyzed | Analysis | NMDS results/comments | 2D stress | ANOSIM | | SIMPER | |
| Global R statistic | Significance (%) | Average dissimilarity (%) | Top contributing species/categories (%) |
| Fish biomass (kg/transect) |  |  |  |  |  |  |  |
|  | All replicates, all depths | Poor but significant separation between shallow and deep replicates with more dissimilarity within groups than between them. | 0.27 | 0.31 | 0.1 | 85.2 | *Acanthurus sohal (11.6), Stegastes nigricans (5.8), Caesio lunaris (4.6)* |
|  | Reef averages, all depths | Poor separation between inshore and other reefs, with more dissimilarity within groups than between them. | 0.04 | 0.6 | 2.4 | 56 | *Stegastes nigricans (8.3), Pseudanthias squamipinnis (6.2), Thalassoma ruepellii (4.1)* |
|  | 10 m replicates only | Poor separation between 2 inshore reefs and all other reefs with more dissimilarity within groups than between them. | 0.24 | - | - | - | *-* |
|  | 10 m reef averages | Strong significant separation between 2 inshore reefs and all other reefs with high dissimilarity between the 2 inshore reefs. | 0.01 | 0.94 | 2.8 | 83.7 | *Caesio lunaris (7.9), Abudefduf sexfasciatus (5.0), Naso unicornis (4.6)* |
|  | 2 m replicates only | Poor separation between inshore reefs and all other reefs with more dissimilarity within groups than between them. | 0.21 | - | - | - | *-* |
|  | 2 m reef averages | Slight separation between inshore and other reefs with more dissimilarity within groups than between them. | 0.08 | 0.78 | 1.2 | 71 | *Stegastes nigricans (14.6), Acanthurus sohal (10.8), Naso unicornis (5.4)* |
| Fish density (fish/transect) |  |  |  |  |  |  |  |
|  | All replicates, all depths | Poor but significant separation between shallow and deep replicates with more dissimilarity within groups than between them. | 0.21 | 0.23 | 0.1 | 72.7 | *Chromis dimidiata (4.2), C. flavaxilla (3.9), Acanthurus sohal (3.5)* |
|  | Reef averages, all depths | Poor but significant separation between inshore and other reefs with more dissimilarity within groups than between them. | 0.07 | 0.75 | 1.2 | 56.7 | *Chromis dimidiata (9.5), Caesio lunaris (7.9), Chromis flavaxilla (6.7)* |
|  | 10 m replicates | Clear separation between 2 inshore reefs and all other reefs with more dissimilarity between the 2 inshore reefs than between groups. | 0.12 | - | - | - | *-* |
|  | 10 m reef averages | Clear and significant separation between 2 inshore reefs and all other reefs with more dissimilarity between the 2 inshore reefs than between groups. | 0.01 | 0.99 | 2.8 | 75.3 | *Chromis dimidiata + C. flavaxilla (14.4), Caesio lunaris + Pseudanthias squamipinnis (10.8)* |
|  | 2 m replicates | Poor separation between inshore reefs and all other reefs with more dissimilarity within groups than between them. | 0.19 | - | - | - | *-* |
|  | 2 m reef averages | Slight, yet significant, separation between inshore and other reefs with more dissimilarity within groups than between them. | 0.05 | 0.77 | 1.2 | 56.8 | *Stegastes nigricans (6.8), Chromis dimidiata + C. flavaxilla (8.5), Acanthurus nigrofuscus (3.8)* |
| Benthic cover (%) |  |  |  |  |  |  |  |
|  | All replicates, all depths | Poor but significant separation between shallow and deep replicates with more dissimilarity within groups than between them. | 0.17 | 0.45 | 0.1 | 57.4 | CCA *(14.0),* rubble + sand *(18.8),* turf algae *(7.4), Pocillopora (7.0)* |
|  | Reef averages, all depths | Poor separation between inshore reefs and all other reefs with more dissimilarity within groups than between them. | 0.08 | 0.65 | 1.2 | 41.3 | Sand *(13.1), Pocillopora (12.2),* CCA *(11.3),* turf algae *(10.2)* |
|  | 10 m replicates | No clear separation of groups. | 0.15 | - | - | - | *-* |
|  | 10 m reef averages | Separation of inshore plus 2 midshelf reefs from all other reefs, with more dissimilarity within than between groups. | 0.08 | 0.78 | 0.8 | 48.7 | Sand + rubble *(32), CCA (9.2),* Xeniidae *(5.1), Porites (5.1)* |
|  | 2 m replicates | Poor separation between inshore reefs and all other reefs with more dissimilarity within groups than between them. | 0.15 | - | - | - | *-* |
|  | 2 m reef averages | Clear separation between inshore reefs and all other reefs with more dissimilarity within groups than between them. | 0.08 | 0.82 | 1.2 | 50.8 | Turf algae *(14.6), Pocillopora (14.3),* CCA *(13.5),* rock *(10.4), Porites (10.0),* Xeniidae *(9.6)* |
| Fish density (fish/transect) and benthic cover (%) |  |  |  |  |  |  |  |
|  | Reef averages, all depths | Slightly better separation between inshore and other reefs compared to fish counts or benthic cover alone. | 0.04 | 0.74 | 1.2 | 49.8 | *Stegastes nigricans (4.9), Chromis dimidiata (4.6), Caesio lunaris (3.8)* |