**Supplementary materials**

**Table S1** The abundance (individuals per pitfall trap; Mean±SD) of ground-active arthropods at each location from the seashore for winter season. Distances from seashore: L1 = 20 m, L2 = 400 m, L3 = 2000 m, L4 = 4000 m. Ph= phytophage, Pr=predator, Om=omnivore, Sa=saprophagy.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Taxa** | **Trophic** | **L1** | **L2** | **L3** | **L4** | ***F*** |
| Porcellionidae | Om |  | 0.25±0.205 | 0.75±0.407 | 17.75±17.08 | 1.04 |
| Oniscidae | Ph |  |  |  |  |  |
| Scutigeridae | Pr |  |  |  |  |  |
| Psittacidae | Pr |  |  |  |  |  |
| Geophilidae | Pr |  |  | 0.25±0.25 | 0.50±0.50 | 0.73 |
| Lithobiidae | Pr |  |  |  |  |  |
| Opiliones | Pr |  | 0.75±0.25 | 14.75±11.13 | 12±5.49 | 1.50 |
| Salticidae | Pr |  |  |  |  |  |
| Theridiidae | Pr |  |  |  |  |  |
| Araneidae | Pr |  | 0.25±0.25 | 0.50±0.50 | 0.25±0.25 | 0.80 |
| Gnaphosidae | Pr |  | 0.25±0.25 |  | 0.25±0.25 | 0.67 |
| Philodromidae | Pr |  |  |  | 0.25±0.25 | 1 |
| Liocranidae | Pr |  |  |  | 0.25±0.25 | 1 |
| Lycosidae | Pr |  |  | 2.25±0.85 | 1.25±0.47 | 4.96\* |
| Clubionidae | Pr |  | 0.25±0.25 | 0.25±0.25 | 0.75±0.47 | 1.12 |
| Thomisidae | Pr |  |  | 0.25±0.25 |  | 1 |
| Oxyopidae | Pr |  |  |  | 0.75±0.75 | 1 |
| Oonopidae | Pr |  |  |  | 1.00±0.41 | 6.00\*\* |
| Labiduridae | Pr |  |  |  |  |  |
| Myrmeleontidae larvae | Pr |  |  | 0.25±0.25 |  | 1 |
| Coreidae | Ph |  |  |  |  |  |
| Miridae | Ph |  |  |  |  |  |
| Cydnidae | Ph |  |  |  |  |  |
| Lygaeidae | Ph |  |  |  |  |  |
| Mantidae | Pr |  |  |  |  |  |
| Gryllidae | Ph |  |  |  |  |  |
| Cicadellidae | Ph |  |  |  |  |  |
| Membracidae | Ph |  |  |  |  |  |
| Acrididae | Ph |  |  |  |  |  |
| Carabidae | Pr |  | 0.75±0.25 | 0.50±0.50 | 2.00±1.22 | 1.6 |
| Coccinellidae | Ph |  |  |  |  |  |
| Anthicidae | Ph |  |  |  |  |  |
| Tenebrionidae | Ph |  | 1.00 | 2.50±1.50 | 0.25±0.25 | 2.04 |
| Staphylinidae | Pr |  |  | 0.25±0.25 | 0.75±0.47 | 1.71 |
| Elateridae | Ph |  |  |  |  |  |
| Buprestidae | Ph |  |  |  |  |  |
| Siovanidae | Ph |  |  |  |  |  |
| Lagriinae | Ph |  |  |  |  |  |
| Meloidae | Ph |  |  |  | 0.25±0.25 | 1 |
| Cetoniinae | Ph |  |  | 1.50±0.64 |  | 5.40\* |
| ArmadIllidiidae | Ph |  |  |  |  |  |
| Aphaenocephalidae | Ph |  |  |  |  |  |
| Erotylidae | Ph |  |  | 1.00 | 2.50±2.50 | 0.77 |
| Biphyllidae | Ph |  |  |  |  |  |
| Dermestidae | Ph |  |  |  |  |  |
| Bostrychidae | Ph |  |  |  |  |  |
| Curculionidae | Ph |  |  | 0.75±0.47 | 1.75±1.43 | 1.2 |
| Bruchidae | Ph |  |  |  |  |  |
| Silphidae | Sa |  |  |  |  |  |
| Histeridae | Sa |  |  |  |  |  |
| Carabidae larvae | Pr |  | 0.25±0.25 | 0.25±0.25 | 0.25±0.25 | 0.33 |
| Coccinellidae larvae | Ph |  |  |  |  |  |
| Meloidae larvae | Ph |  |  |  |  |  |
| Tenebrionidae larvae | Ph |  |  |  |  |  |
| Silphidae larvae | Sa |  |  | 0.75±0.25 | 0.5±0.28 | 3.86\* |
| Formicidae | Om | 1.75±0.47 | 6.75±1.11 | 16.5±5.95 | 46.75±17.34 | 4.82\* |
| Ichneumonidae | Ph |  |  |  |  |  |
| Sphecidae | Ph |  |  |  |  |  |
| Tabanidae | Pr |  |  |  |  |  |
| Lepidoptera larvae | Ph |  |  | 0.25±0.25 |  | 1 |
| Machiiidae larvae | Ph |  |  |  | 0.25±0.25 | 1 |
| Machiiidae | Ph |  |  |  |  | 1.04 |
| Blattidae | Om |  |  |  |  |  |
| Mite | Ph |  |  |  |  |  |
| Unknowns |  |  |  |  |  |  |

**Table S2** The abundance (Individuals per pitfall trap; Mean±SD) of ground-active arthropods at each location from the seashore for spring season. Distances from seashore: L1 = 20 m, L2 = 400 m, L3 = 2000 m, L4 = 4000 m. Ph= phytophage, Pr=predator, Om=omnivore, Sa=saprophagy.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Taxa** | **L1** | **L2** | **L3** | **L4** | ***F*** |
| Porcellionidae |  |  |  | 0.25±0.25 | 0.9 |
| Oniscidae |  |  |  |  |  |
| Scutigeridae |  |  |  | 0.25±0.25 | 0.9 |
| Psittacidae |  |  | 0.33±0.33 |  | 1.47 |
| Geophilidae |  |  | 1.00 |  | 4.40\* |
| Lithobiidae |  | 0.25±0.25 |  |  | 0.9 |
| Opiliones |  | 0.25±0.25 | 0.67±0.67 |  | 1.06 |
| Salticidae | 0.25±0.25 | 0.25±0.25 | 0.33±0.33 | 1.50±0.29 | 5.13\* |
| Theridiidae |  |  |  |  |  |
| Araneidae |  | 0.25±0.25 | 0.33±0.33 |  | 0.82 |
| Gnaphosidae | 0.50±0.50 | 1.25±0.48 | 1.00 | 1.25±0.48 | 0.52 |
| Philodromidae |  | 1.00 | 1.33±1.33 | 3.25±1.60 | 1.79 |
| Liocranidae |  | 0.75±0.48 |  | 2.75±1.18 | 3.65\* |
| Lycosidae |  | 2.25±0.63 | 1.33±0.33 | 0.25±0.25 | 7.59\*\* |
| Clubionidae | 0.25±0.25 | 1.25±0.75 | 1.00 | 0.75±0.25 | 0.55 |
| Thomisidae |  | 0.75±0.25 | 0.33±0.33 | 0.75±0.25 | 2.65 |
| Oxyopidae |  |  |  | 0.25±0.25 | 0.9 |
| Oonopidae |  |  |  |  |  |
| Labiduridae |  |  |  |  |  |
| Myrmeleontidae larvae |  |  | 0.67±0.67 |  | 1.47 |
| Coreidae |  | 0.25±0.25 | 0.33±0.33 |  | 0.82 |
| Miridae |  | 1.00 |  |  | 5.38\* |
| Cydnidae |  | 0.25±0.25 | 0.67±0.33 |  | 2.55 |
| Lygaeidae | 0.25±0.25 |  |  | 0.25±0.25 | 0.57 |
| Mantidae |  |  |  | 2.25±1.65 | 1.66 |
| Gryllidae |  |  |  | 0.50±0.50 | 0.9 |
| Cicadellidae | 0.25±0.25 | 2.50±1.19 | 0.33±0.33 | 0.25±0.25 | 2.79 |
| Membracidae |  | 0.25±0.25 |  | 0.25±0.25 | 0.57 |
| Acrididae |  | 0.50±0.50 | 0.67±0.67 |  | 0.82 |
| Carabidae |  | 0.50±0.50 | 0.33±0.33 | 0.25±0.25 | 0.43 |
| Coccinellidae |  | 0.50±0.50 |  | 0.25±0.25 | 0.64 |
| Anthicidae | 1.00 | 0.75±0.48 | 1.00 |  | 0.57 |
| Tenebrionidae | 21.50±11.58 | 15.25±4.53 | 18.00±4.0 | 7.50±2.02 | 0.77 |
| Staphylinidae |  | 0.50±0.29 | 0.67±0.67 | 0.25±0.25 | 0.76 |
| Elateridae |  | 0.25±0.25 | 1.33±1.33 |  | 1.26 |
| Buprestidae |  | 0.25±0.25 |  |  | 0.9 |
| Siovanidae |  |  | 0.67±0.67 |  | 1.47 |
| Lagriinae |  | 0.50±0.50 |  | 1.50±1.50 | 0.7 |
| Meloidae |  |  |  |  |  |
| Cetoniinae |  | 0.25±0.25 | 0.67±0.33 | 0.50±0.29 | 1.39 |
| ArmadIllidiidae |  | 0.50±0.50 |  |  | 0.9 |
| Aphaenocephalidae | 0.25±0.25 |  |  |  | 0.9 |
| Erotylidae |  |  |  |  |  |
| Biphyllidae |  | 0.50±0.29 |  |  | 2.69 |
| Dermestidae | 0.25±0.25 | 2.75±0.95 | 8.33±3.28 | 0.25±0.25 | 6.81\*\* |
| Bostrychidae |  |  | 0.67±0.67 | 0.25±0.25 | 1.06 |
| Curculionidae |  | 1.25±0.25 | 0.67±0.33 |  | 11.17\*\* |
| Bruchidae |  |  |  | 0.25±0.25 | 0.9 |
| Silphidae |  |  |  | 0.25±0.25 | 0.9 |
| Histeridae |  | 0.25±0.25 |  | 0.25±0.25 | 0.57 |
| Carabidae larvae |  |  |  |  |  |
| Coccinellidae larvae |  | 0.50±0.50 |  | 1.25±0.75 | 1.5 |
| Meloidae larvae |  |  | 0.33±0.33 |  | 1.47 |
| Tenebrionidae larvae |  | 0.50±0.50 | 0.67±0.33 |  | 1.27 |
| Silphidae larvae |  | 0.25±0.25 |  |  | 0.9 |
| Formicidae | 5.75±3.30 | 16.25±2.17 | 16.67±7.51 | 53.50±9.04 | 12.68\*\*\* |
| Ichneumonidae | 0.25±0.25 |  | 0.33±0.33 | 0.50±0.29 | 0.78 |
| Sphecidae |  | 0.25±0.25 |  |  | 0.9 |
| Tabanidae |  |  |  | 0.25±0.25 | 0.9 |
| Lepidoptera larvae |  | 1.50±1.19 | 1.33±0.88 |  | 1.3 |
| Machiiidae larvae |  | 1.75±1.44 |  |  | 1.33 |
| Machiiidae |  | 0.50±0.29 |  |  | 2.69 |
| Blattidae |  |  |  |  |  |
| Mite | 0.25±0.25 | 0.50±0.50 |  |  | 0.64 |
| Unknowns |  | 0.25±0.25 |  |  | 0.9 |

**Table S3** The abundance (Individuals per pitfall trap; Mean±SD) of ground-active arthropods at each location from the seashore for summer season. Distances from seashore: L1 = 20 m, L2 = 400 m, L3 = 2000 m, L4 = 4000 m. Ph= phytophage, Pr=predator, Om=omnivore, Sa=saprophagy.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Taxa** | **L1** | **L2** | **L3** | **L4** | ***F*** |
| Porcellionidae |  |  |  |  |  |
| Oniscidae |  |  | 0.25±0.25 |  | 1 |
| Scutigeridae |  |  | 0.25±0.25 |  | 1 |
| Psittacidae | 0.25±0.25 | 1.75±0.63 | 3.00±1.15 | 1.50±0.87 | 2 |
| Geophilidae |  |  |  |  |  |
| Lithobiidae |  |  |  |  |  |
| Opiliones |  |  |  |  |  |
| Salticidae |  |  |  |  |  |
| Theridiidae | 0.25±0.25 |  |  | 0.25±0.25 | 0.67 |
| Araneidae |  |  |  |  |  |
| Gnaphosidae | 0.75±0.48 |  |  |  | 2.45 |
| Philodromidae |  |  |  |  |  |
| Liocranidae |  |  |  |  |  |
| Lycosidae |  |  |  |  |  |
| Clubionidae |  |  |  |  |  |
| Thomisidae | 0.25±0.25 |  |  |  | 1 |
| Oxyopidae |  |  |  |  |  |
| Oonopidae |  |  |  |  |  |
| Labiduridae | 0.25±0.25 | 0.50±0.29 |  |  | 1.57 |
| Myrmeleontidae larvae |  |  |  |  |  |
| Coreidae |  |  |  |  |  |
| Miridae |  |  |  |  |  |
| Cydnidae |  |  |  |  |  |
| Lygaeidae |  |  |  |  |  |
| Mantidae |  |  | 0.25±0.25 |  | 1 |
| Gryllidae |  |  |  |  |  |
| Cicadellidae |  |  |  |  |  |
| Membracidae |  |  |  |  |  |
| Acrididae |  |  |  |  |  |
| Carabidae |  |  |  |  |  |
| Coccinellidae |  |  |  |  |  |
| Anthicidae |  |  |  |  |  |
| Tenebrionidae | 3.75±2.10 | 2.25±1.31 | 4.50±1.19 | 1.25±0.63 | 1.08 |
| Staphylinidae |  |  |  |  |  |
| Elateridae |  |  |  |  |  |
| Buprestidae |  |  |  |  |  |
| Siovanidae |  |  |  |  |  |
| Lagriinae |  |  |  |  |  |
| Meloidae |  |  |  |  |  |
| Cetoniinae |  |  |  |  |  |
| ArmadIllidiidae |  |  |  |  |  |
| Aphaenocephalidae |  |  |  |  |  |
| Erotylidae |  |  |  |  |  |
| Biphyllidae |  |  |  |  |  |
| Dermestidae |  |  |  |  |  |
| Bostrychidae |  |  |  |  |  |
| Curculionidae |  |  |  |  |  |
| Bruchidae |  |  |  |  |  |
| Silphidae |  |  |  |  |  |
| Histeridae |  |  |  |  |  |
| Carabidae larvae |  |  |  |  |  |
| Coccinellidae larvae |  |  |  |  |  |
| Meloidae larvae |  |  |  |  |  |
| Tenebrionidae larvae |  | 0.25±0.25 |  |  | 1 |
| Silphidae larvae |  |  |  |  |  |
| Formicidae | 4.00±1.22 | 4.75±2.63 | 15.50±5.91 | 24.50±7.18 | 4.00\* |
| Ichneumonidae |  |  |  |  |  |
| Sphecidae |  |  |  |  |  |
| Tabanidae |  |  |  |  |  |
| Lepidoptera larvae |  |  | 0.25±0.25 |  | 1 |
| Machiiidae larvae |  |  |  |  |  |
| Machiiidae |  |  |  |  |  |
| Blattidae | 0.25±0.25 |  | 4.00±3.34 |  | 1.37 |
| Mite |  |  |  |  |  |
| Unknowns |  |  |  |  |  |