An insight to the quality of Sacred Groves, using leaf-litter ants as an indicator, in a context of landscape types

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Table. S1. Ant species in different functional groups.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Cryptic**  **species** | **Generalised**  **myrmicinae** | **Hot Climate**  **Specialist** | **Opportunist** | **Subordinate Camponotini** | **Special**  **Predator** | **Tropical Climate**  **Specialist** |
| *Acropyga acutiventris* | *Carebara affinis* | *Meranoplus sp* | *Anoplolepis gracilipes\** | *Camponotus angusticollis* | *Anochetus myops* | *Aenictus aitkenii* |
| *Discothyrea sringerensis* | *Carebara nayana* |  | *Cardiocondyla sp* | *Camponotus confuci* | *Bothroponera sulcata* | *Dolichoderus sp* |
| *Hypoponera assmuthi* | *Carebara obtusidenta* |  | *Cardiocondyla sp1* | *Camponotus minor sp1* | *Brachyponera luteipes* | *Dolichoderus taprobanae* |
| *Hypoponera confinis* | *Carebara sp* |  | *Diacamma assamense* | *Camponotus variegatus infuscus* | *Leptogenys assamensis* | *Gnamptogenys coxalis* |
| *Hypoponera queen* | *Crematogaster sp3* |  | *Diacamma ceylonense* | *Polyrhachis exercita rastrata* | *Leptogenys diminuta* | *Oecophylla smaragdina* |
| *Leptanilla sp* | *Crematogaster*  *wroughtonii* | | *Lepisiota opaca\** |  | *Odontomachus haematodus* |  |
| *Parasyscia seema* | *Myrmicaria brunnea* |  | *Monomorium floricola\** |  | *Odontoponera denticulata* |  |
| *Parasyscia sp* | *Myrmicinae sp* |  | *Monomorium sp1* |  | *Pseudoneoponera rufipes* |  |
| *Strumigenys fixata* | *Myrmicinae sp1* |  | *Monomorium sp2* |  |  |  |
| *Strumigenys hostilis* | *Pheidole sp1* |  | *Nylanderia indica* |  |  |  |
| *Strumigenys lyroessa* | *Pheidole sp18* |  | *Paratrechina longicornis\** |  |  |  |
|  | *Pheidole sp19* |  | *Solenopsis geminata\** |  |  |  |
|  | *Pheidole sp2* |  | *Tapinoma melanocephalum\** |  |  |  |
|  | *Pheidole sp3* |  | *Tetramorium belgaense* |  |  |  |
|  | *Pheidole sp6* |  | *Tetramorium indicum* |  |  |  |
|  | *Pheidole sp8* |  | *Tetramorium lanuginosum\** |  |  |  |
|  | *Pheidole multidens* |  | *Tetramorium mixtum* |  |  |  |
|  | *Pheidole templaria* |  | *Tetramorium pacificum* |  |  |  |
|  | *Pheidole watsoni* |  | *Tetramorium smithi* |  |  |  |
|  |  |  | *Tetraponera aitkenii* |  |  |  |

Table S2. Summary of ant abundance, richness, and diversity in urban and rural SGs and HGs. Mean±SE are given

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | **Urban.SG** | **Rural.SG** | **Urban.HG** | **Rural.HG** |
| Abundance | 578.60±164.41 | 411.83±96.16 | 724.20±271.76 | 393.17±54.27 |
| Richness | 18.40±0.93 | 19±1.63 | 15.80±1.59 | 19.50±1.71 |
| Shannon diversity | 2.02±0.03 | 2.03±0.01 | 1.93±0.03 | 1.95±0.01 |
| Native abundance | 250±27.98 | 236.50±50.26 | 250±51.58 | 218.83±42.11 |
| Native richness | 14.80±1.16 | 15.17±1.68 | 11.60±1.57 | 14.50±1.52 |
| Invasive abundance | 328.60±155 | 175.33±51.99 | 474.20±280.97 | 176.33±45.03 |
| Invasive richness | 3.60±0.40 | 3.83±0.17 | 4.20±0.20 | 5±0.58 |
| *A.gracilipes* abundance | 298.60±152.80 | 138.67±56.07 | 416.40±286.32 | 108±39.16 |



Fig. S1. Average trap incidence of ant species in pitfalls of sacred grove and home garden sites. Many species encountered frequently in home gardens (HG.PF) were rare in sacred groves (SG.PF)



Fig. S2. The relationships between A. gracilipes abundance and ants of various functional guilds in the overall data. Different colors indicate different site type.



Fig. S3. The relationships between *A. gracilipes* abundance and abundance of different ant functional groups in sacred groves (sg) and home gardens (hg)