

S1 Appendix. Bat-fruit interaction matrices by site and season. Letter B refers to TMCF, while letter C refers to SCP.

| B1 Wet | <i>Artibeus jamaicensis</i> | <i>Artibeus tolteca</i> | <i>Sturnira parvidens</i> | <i>Sturnira hondurensis</i> |
|-----------------------------------|-----------------------------|-------------------------|---------------------------|-----------------------------|
| <i>Aff. Cecropia</i> | 1 | 0 | 0 | 0 |
| <i>Hedyosmum mexicanum</i> | 0 | 0 | 0 | 7 |
| <i>Piper hispidum</i> | 0 | 0 | 0 | 23 |
| <i>Piper lapathifolium</i> | 0 | 0 | 0 | 8 |
| <i>Piper</i> spp 1 | 0 | 0 | 0 | 2 |
| <i>Solanum acerifolium</i> | 0 | 0 | 0 | 1 |
| <i>Solanum aphyodendron</i> | 0 | 1 | 0 | 10 |
| <i>Solanum schlechtendalianum</i> | 0 | 0 | 1 | 7 |

| B1 Nortes | <i>Carollia sowelli</i> | <i>Sturnira hondurensis</i> |
|----------------------------|-------------------------|-----------------------------|
| <i>Hedyosmum mexicanum</i> | 1 | 19 |
| <i>Piper auritum</i> | 1 | 0 |

| B1 Dry | <i>Carollia sowelli</i> | <i>Sturnira parvidens</i> | <i>Sturnira hondurensis</i> |
|-----------------------------------|-------------------------|---------------------------|-----------------------------|
| <i>Hedyosmum mexicanum</i> | 0 | 2 | 2 |
| <i>Piper hispidum</i> | 0 | 1 | 0 |
| <i>Piper lapathifolium</i> | 2 | 7 | 8 |
| <i>Piper</i> spp 4 | 0 | 0 | 1 |
| Solanaceae spp 4 | 0 | 0 | 6 |
| <i>Solanum aphyodendron</i> | 0 | 2 | 1 |
| <i>Solanum schlechtendalianum</i> | 0 | 0 | 3 |

| B2 Wet | <i>Artibeus jamaicensis</i> | <i>Carollia sowelli</i> | <i>Sturnira hondurensis</i> |
|-----------------------------------|-----------------------------|-------------------------|-----------------------------|
| <i>Hedyosmum mexicanum</i> | 0 | 0 | 2 |
| <i>Piper auritum</i> | 0 | 0 | 2 |
| <i>Piper hispidum</i> | 1 | 5 | 11 |
| <i>Piper lapathifolium</i> | 0 | 0 | 7 |
| Solanaceae spp 1 | 0 | 0 | 1 |
| <i>Solanum aphyodendron</i> | 0 | 1 | 6 |
| <i>Solanum schlechtendalianum</i> | 0 | 0 | 3 |

| B2 Nortes | <i>Carollia sowelli</i> | <i>Dermanura tolteca</i> | <i>Sturnira hondurensis</i> |
|-----------------------------------|-------------------------|--------------------------|-----------------------------|
| <i>Hedyosmum mexicanum</i> | 0 | 0 | 9 |
| <i>Miconia glaberrima</i> | 0 | 0 | 1 |
| <i>Piper auritum</i> | 2 | 0 | 2 |
| <i>Solanum aphyodendron</i> | 0 | 1 | 2 |
| <i>Solanum schlechtendalianum</i> | 0 | 0 | 1 |

| B2 Dry | <i>Carollia sowelli</i> | <i>Sturnira parvidens</i> | <i>Sturnira hondurensis</i> |
|-----------------------------------|-------------------------|---------------------------|-----------------------------|
| <i>Hedyosmum mexicanum</i> | 1 | 3 | 4 |
| Spp 1 | 0 | 2 | 1 |
| <i>Piper hispidum</i> | 1 | 0 | 0 |
| <i>Piper lapathifolium</i> | 3 | 6 | 9 |
| Solanaceae spp 3 | 0 | 1 | 3 |
| <i>Solanum aphyodendron</i> | 2 | 6 | 1 |
| <i>Solanum schlechtendalianum</i> | 0 | 1 | 0 |

| B3 Wet | <i>Carollia sowelli</i> | <i>Sturnira hondurensis</i> |
|-----------------------------------|-------------------------|-----------------------------|
| <i>Hedyosmum mexicanum</i> | 0 | 1 |
| <i>Piper hispidum</i> | 2 | 8 |
| <i>Piper lapathifolium</i> | 0 | 4 |
| <i>Piper</i> spp 3 | 0 | 1 |
| <i>Solanum aphyodendron</i> | 0 | 2 |
| <i>Solanum schlechtendalianum</i> | 0 | 8 |

| B3 Nortes | <i>Artibeus jamaicensis</i> | <i>Carollia sowelli</i> | <i>Sturnira parvidens</i> | <i>Sturnira hondurensis</i> |
|-----------------------------------|-----------------------------|-------------------------|---------------------------|-----------------------------|
| <i>Hedyosmum mexicanum</i> | 0 | 0 | 0 | 2 |
| <i>Lycianthes geminifolia</i> | 0 | 0 | 0 | 1 |
| Spp 5 | 1 | 0 | 0 | 0 |
| <i>Piper auritum</i> | 0 | 0 | 0 | 3 |
| Solanaceae spp 2 | 0 | 1 | 0 | 0 |
| <i>Solanum acerifolium</i> | 0 | 0 | 0 | 1 |
| <i>Solanum diflorum</i> | 0 | 1 | 0 | 1 |
| <i>Solanum schlechtendalianum</i> | 0 | 1 | 2 | 5 |

| B3 Dry | <i>Carollia sowelli</i> | <i>Sturnira parvidens</i> | <i>Sturnira hondurensis</i> |
|-------------------------------|-------------------------|---------------------------|-----------------------------|
| <i>Lycianthes geminifolia</i> | 0 | 1 | 0 |
| <i>Piper hispidum</i> | 0 | 0 | 1 |
| <i>Piper lapathifolium</i> | 1 | 3 | 4 |
| <i>Piper</i> spp 4 | 0 | 0 | 1 |
| Solanaceae spp 4 | 0 | 0 | 1 |

| B4 Wet | | | | |
|-----------------------------------|-----------------------------|-------------------------|---------------------------|-----------------------------|
| | <i>Artibeus jamaicensis</i> | <i>Carollia sowelli</i> | <i>Sturnira parvidens</i> | <i>Sturnira hondurensis</i> |
| <i>Solanum aphyodendron</i> | 1 | 1 | 2 | |
| <i>Solanum schlechtendalianum</i> | 0 | 1 | 1 | |
| Spp 4 | 1 | 0 | 0 | 0 |
| <i>Piper auritum</i> | 0 | 0 | 0 | 1 |
| <i>Piper hispidum</i> | 0 | 2 | 0 | 5 |
| <i>Piper lapathifolium</i> | 0 | 1 | 0 | 4 |
| Solanaceae spp1 | 0 | 0 | 0 | 2 |
| <i>Solanum aphyodendron</i> | 0 | 0 | 0 | 5 |
| <i>Solanum schlechtendalianum</i> | 1 | 0 | 1 | 3 |

| B4 Nortes | | | | | | |
|-----------------------------------|-----------------------------|-------------------------|--------------------------|---------------------------------|---------------------------|-----------------------------|
| | <i>Artibeus jamaicensis</i> | <i>Carollia sowelli</i> | <i>Dermanura tolteca</i> | <i>Glossophaga commissarisi</i> | <i>Sturnira parvidens</i> | <i>Sturnira hondurensis</i> |
| <i>Hedyosmum mexicanum</i> | 0 | 0 | 0 | 0 | 0 | 6 |
| <i>Lycianthes geminifolia</i> | 0 | 0 | 1 | 0 | 1 | 1 |
| <i>Piper auritum</i> | 0 | 3 | 0 | 0 | 0 | 3 |
| <i>Solanum aphyodendron</i> | 0 | 0 | 2 | 0 | 0 | 1 |
| <i>Solanum schlechtendalianum</i> | 0 | 1 | 0 | 0 | 0 | 4 |
| <i>Trema micrantha</i> | 3 | 0 | 4 | 1 | 0 | 4 |

| B4 Dry | | | | | |
|-------------------------------|-----------------------------|-------------------------|--------------------------|---------------------------|-----------------------------|
| | <i>Artibeus jamaicensis</i> | <i>Carollia sowelli</i> | <i>Dermanura tolteca</i> | <i>Sturnira parvidens</i> | <i>Sturnira hondurensis</i> |
| <i>Hedyosmum mexicanum</i> | 0 | 0 | 0 | 0 | 1 |
| <i>Lycianthes geminifolia</i> | 0 | 0 | 0 | 1 | 0 |
| Spp 1 | 0 | 1 | 0 | 0 | 1 |
| <i>Piper hispidum</i> | 0 | 1 | 0 | 0 | 0 |

| | | | | | |
|-----------------------------|-------------------------|-----------------------------|---|---|----|
| <i>Piper lapathifolium</i> | 0 | 2 | 0 | 6 | 10 |
| <i>Solanum aphyodendron</i> | 1 | 2 | 1 | 1 | 1 |
| C1 Wet | <i>Carollia sowelli</i> | <i>Glossophaga soricina</i> | | | |
| <i>Miconia mexicana</i> | 0 | 1 | | | |
| <i>Piper spp 2</i> | 1 | 0 | | | |

| | | | | |
|-----------------------------------|-----------------------------|-------------------------|---------------------------|-----------------------------|
| C1 Nortes | <i>Artibeus jamaicensis</i> | <i>Carollia sowelli</i> | <i>Sturnira parvidens</i> | <i>Sturnira hondurensis</i> |
| <i>Lycianthes geminifolia</i> | 0 | 1 | 0 | 1 |
| <i>Piper auritum</i> | 1 | 1 | 0 | 2 |
| <i>Solanum acerifolium</i> | 0 | 0 | 0 | 1 |
| <i>Solanum schlechtendalianum</i> | 0 | 0 | 0 | 2 |
| <i>Vismia mexicana</i> | 0 | 2 | 1 | 1 |

| | | | | |
|-------------------------------|-----------------------------|-------------------------|---------------------------|-----------------------------|
| C1 Dry | <i>Artibeus jamaicensis</i> | <i>Carollia sowelli</i> | <i>Sturnira parvidens</i> | <i>Sturnira hondurensis</i> |
| <i>Ficus (Urostigma)</i> | 1 | 0 | 0 | 0 |
| <i>Lycianthes geminifolia</i> | 1 | 0 | 1 | 0 |
| Spp 2 | 1 | 0 | 0 | 0 |
| <i>Piper lapathifolium</i> | 0 | 1 | 0 | 2 |
| <i>Solanum aphyodendron</i> | 0 | 1 | 0 | 3 |

| C2 Wet | <i>Artibeus jamaicensis</i> | <i>Sturnira hondurensis</i> |
|-----------------------------|-----------------------------|-----------------------------|
| <i>Aff. Cecropia</i> | 1 | 0 |
| <i>Piper auritum</i> | 0 | 1 |
| <i>Piper hispidum</i> | 0 | 1 |
| <i>Solanum aphyodendron</i> | 0 | 2 |
| <i>Trema micrantha</i> | 1 | 0 |

| C2 Nortes | <i>Artibeus jamaicensis</i> | <i>Sturnira hondurensis</i> |
|-----------------------------------|-----------------------------|-----------------------------|
| <i>Lycianthes geminifolia</i> | 1 | 0 |
| <i>Piper auritum</i> | 0 | 1 |
| Solanaceae spp 2 | 0 | 1 |
| <i>Solanum acerifolium</i> | 0 | 1 |
| <i>Solanum aphyodendron</i> | 0 | 1 |
| <i>Solanum schlechtendalianum</i> | 0 | 2 |
| <i>Vismia mexicana</i> | 0 | 3 |

| C2 Dry | <i>Artibeus jamaicensis</i> | <i>Carollia sowelli</i> | <i>Sturnira parvidens</i> | <i>Sturnira hondurensis</i> |
|-------------------------------|-----------------------------|-------------------------|---------------------------|-----------------------------|
| <i>Lycianthes geminifolia</i> | 2 | 0 | 1 | 2 |
| <i>Piper hispidum</i> | 0 | 0 | 1 | 0 |
| <i>Piper lapathifolium</i> | 0 | 0 | 3 | 0 |
| <i>Solanum aphyodendron</i> | 0 | 2 | 2 | 3 |

| C3 Wet | <i>Sturnira hondurensis</i> |
|-------------------------------|-----------------------------|
| <i>Lycianthes geminifolia</i> | 1 |
| <i>Piper auritum</i> | 1 |
| <i>Piper hispidum</i> | 1 |

| C3 Nortes | <i>Artibeus jamaicensis</i> | <i>Carollia sowelli</i> | <i>Dermanura tolteca</i> |
|-------------------------------|-----------------------------|-------------------------|--------------------------|
| <i>Eriobotrya japonica</i> | 0 | 0 | 1 |
| <i>Lycianthes geminifolia</i> | 1 | 0 | 0 |
| <i>Vismia mexicana</i> | 0 | 1 | 0 |

| C3 Dry | <i>Sturnira parvidens</i> |
|----------------------------|---------------------------|
| <i>Piper lapathifolium</i> | 1 |

| C4 Wet | <i>Artibeus jamaicensis</i> | <i>Glossophaga soricina</i> |
|----------------------|-----------------------------|-----------------------------|
| Aff. <i>Cecropia</i> | 1 | 0 |
| <i>Piper</i> spp 5 | 0 | 1 |

| C4 Nortes | <i>Artibeus lituratus</i> | <i>Carollia sowelli</i> | <i>Dermanura tolteca</i> | <i>Sturnira hondurensis</i> |
|-----------------------------------|---------------------------|-------------------------|--------------------------|-----------------------------|
| <i>Hedyosmum mexicanum</i> | 0 | 0 | 0 | 1 |
| Spp 3 | 1 | 0 | 0 | 0 |
| <i>Piper auritum</i> | 0 | 0 | 0 | 5 |
| <i>Solanum acerifolium</i> | 0 | 0 | 0 | 2 |
| <i>Solanum aphyodendron</i> | 0 | 0 | 0 | 3 |
| <i>Solanum schlechtendalianum</i> | 0 | 1 | 0 | 0 |
| <i>Vismia mexicana</i> | 0 | 4 | 1 | 7 |

| C4 Dry | <i>Carollia sowelli</i> | <i>Dermanura tolteca</i> |
|-----------------------------|-------------------------|--------------------------|
| <i>Solanum aphyodendron</i> | 1 | 1 |