**Table S1.** Mean values for fruit yield determined for the interaction Agroforestry systems x Production cycle.

| Agroforestry System | Production Cycle (years) | Yield (kg ha$^{-1}$) |
|---|---|---|
| *E. poeppigiana* | 2018 | 819.3 |
| *C. cateniformis* + *E. poeppigiana* | | 852.5 |
| *C. cateniformis* | | 700.1 |
| *B. gasipaes* | | 573.2 |
| Monoculture | | 540.7 |
| *E. poeppigiana* | 2019 | 456.4 |
| *C. cateniformis* + *E. poeppigiana* | | 456.7 |
| *C. cateniformis* | | 410.6 |
| *B. gasipaes* | | 325.3 |
| Monoculture | | 308.7 |
| *E. poeppigiana* | 2020 | 481.4 |
| *C. cateniformis* + *E. poeppigiana* | | 527.8 |
| *C. cateniformis* | | 442.9 |
| *B. gasipaes* | | 421.7 |
| Monoculture | | 451.4 |
| *E. poeppigiana* | 2021 | 585.7 |
| *C. cateniformis* + *E. poeppigiana* | | 612.3 |
| *C. cateniformis* | | 517.9 |
| *B. gasipaes* | | 440.1 |
| Monoculture | | 433.6 |
| *E. poeppigiana* | 2022 | 533.6 |
| *C. cateniformis* + *E. poeppigiana* | | 570.1 |
| *C. cateniformis* | | 480.4 |
| *B. gasipaes* | | 442.5 |
| Monoculture | | 430.9 |

**Table S2.** Mean values for stored C determined for the interaction Agroforestry systems x Production cycle.

| Agroforestry System | Production years | Total stored C (t ha$^{-1}$) |
|---|---|---|
| *E. poeppigiana* | 2018 | 38.3 |
| *C. cateniformis* + *E. poeppigiana* | | 37.0 |
| *C. cateniformis* | | 33.3 |
| *B. gasipaes* | | 30.0 |
| Monoculture | | 39.6 |
| *E. poeppigiana* | 2019 | 34.2 |
| *C. cateniformis* + *E. poeppigiana* | | 33.0 |
| *C. cateniformis* | | 26.4 |
| *B. gasipaes* | | 26.2 |
| Monoculture | | 30.4 |
| *E. poeppigiana* | 2020 | 39.9 |
| *C. cateniformis* + *E. poeppigiana* | | 34.1 |
| *C. cateniformis* | | 29.0 |
| *B. gasipaes* | | 30.1 |
| Monoculture | | 35.2 |
| *E. poeppigiana* | 2021 | 51.2 |
| *C. cateniformis* + *E. poeppigiana* | | 43.6 |
| *C. cateniformis* | | 37.2 |
| *B. gasipaes* | | 35.9 |
| Monoculture | | 43.0 |
| *E. poeppigiana* | 2022 | 46.4 |
| *C. cateniformis* + *E. poeppigiana* | | 47.5 |
| *C. cateniformis* | | 44.7 |
| *B. gasipaes* | | 41.6 |
| Monoculture | | 49.9 |