Table 2 Mite fauna collected in traps and feathers of laying hen houses (A1, A2, A3 – automated systems; S1, S2 – semiautomated systems; FR – free range), between August 2013 and August 2014, in Vale do Taquari, Rio Grande do Sul, Brazil

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Family | Genus/species |  | A1 | | | A2 | | | A3 | | | S1 | | | S2 | | | FR | | |
|  |  |  | O | Total | *C* | *D* | Total | *C* | *D* | Total | *C* | *D* | Total | *C* | *D* | Total | *C* | *D* | Total | *C* | *D* |
| Astigmata | Acaridae | *Aleuroglyphus ovatus* | F |  |  |  |  |  |  |  |  |  |  |  |  | 1 | Ai | R | 1 | Ai | R |
| T |  |  |  | 3 | Ai | R |  |  |  | 8 | Ai | R |  |  |  | 2 | Ai | R |
| *Thyreophagus entomophagus* | T | 50 | Ai | S | 1 | Ai | R | 1 | Ai | R | 2 | Ai | R |  |  |  |  |  |  |
| *Tyrophagus putrescentiae* | F | 1 | Ai | R | 1 | Ai | R | 7 | Ai | R | 7 | Ai | R | 2 | Ai | R | 4 | Ai | R |
| T | 8 | Ai | R | 6 | Ai | R | 36 | Ae | S | 6 | Ai | R | 6 | Ai | R |  |  |  |
| Analgidae | *Megninia ginglymura* | F | 238 | Ae | E | 2211 | Co | E | 1628 | Co | E | 9234 | Co | E | 9121 | Co | E | 5873 | Co | E |
| T | 86 | Co | M | 81 | Co | S | 51 | Co | S | 660 | Co | E | 181 | Co | M | 269 | Co | E |
| Carpoglyphidae | *Carpoglyphus lactis* | T | 1 | Ai | R |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Chortoglyphidae | *Chortoglyphus arcuatus* | T |  |  |  |  |  |  |  |  |  |  |  |  | 1 | Ai | R | 90 | Co | M |
| Glycyphagidae | *Ctenoglyphus* sp*.* nov. | T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 15 | Ai | V |
| *Glycyphagus destructor* | T | 1 | Ai | R |  |  |  |  |  |  |  |  |  | 1 | Ai | R | 120 | Ae | E |
| Epidermoptidae | *-* | T |  |  |  |  |  |  |  |  |  | 3 | Ai | R |  |  |  |  |  |  |
| Pyroglyphidae | *Dermatophagoides farinae* | F |  |  |  | 1 | Ai | R |  |  |  |  |  |  |  |  |  |  |  |  |
| *Tuccioglyphus setosus* | F | 5 | Ai | S | 6 | Ai | R | 13 | Ae | R |  |  |  | 7 | Ai | R |  |  |  |
| T | 481 | Co | E | 1273 | Co | E | 377 | Co | E | 184 | Co | E | 932 | Co | E | 16 | Ae | V |
|  | Suidasiidae | *Suidasia pontifica* | T |  |  |  |  |  |  |  |  |  | 3 | Ai | R |  |  |  |  |  |  |
| Mesostigmata | Ascidae | *Proctolaelaps* *pomorum* | T |  |  |  |  |  |  | 1 | Ai | R |  |  |  |  |  |  |  |  |  |
| Blattisocidae | *Blattisocius dentriticus* | F | 1 | Ai | R |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| T | 8 | Ai | R | 7 | Ae | R | 9 | Ae | R | 55 | Ae | S | 11 | Ai | R | 2 | Ai | R |
| *Blattisocius keegani* | F |  |  |  | 1 | Ai | R | 1 | Ai | R | 1 | Ai | R | 3 | Ai | R |  |  |  |
| T | 54 | Co | S | 16 | Ae | R | 45 | Co | S | 62 | Ai | S | 4 | Ai | R |  |  |  |
| Laelapidae | *Hypoaspis lubrica* | T |  |  |  |  |  |  |  |  |  | 1 | Ai | R |  |  |  |  |  |  |
| Macrochelidae | *Macrocheles muscaedomesticae* | F |  |  |  |  |  |  |  |  |  | 1 | Ai | R |  |  |  |  |  |  |
| T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 8 | Ai | R |
| Phytoseiidae | *Typhlodromus transvaalensis* | F | 3 | Ai | V |  |  |  |  |  |  | 1 | Ai | R | 1 | Ai | R |  |  |  |
| T | 89 | Co | M | 11 | Ae | R | 133 | Co | E | 5 | Ae | R | 65 | Co | S | 1 | Ai | R |
| Uropodidae | *Fuscuropoda* sp. | T | 1 | Ai | R |  |  |  |  |  |  | 2 | Ai | R |  |  |  |  |  |  |
| Prostigmata | Caligonellidae | *Molotrognathus* sp. | T |  |  |  |  |  |  |  |  |  | 1 | Ai | R | 1 | Ai | R |  |  |  |
| *Paraneognathus wangae* | T |  |  |  |  |  |  |  |  |  | 4 | Ai | R | 1 | Ai | R | 1 | Ai | R |
| Cheyletidae | *Chelacheles bipanus* | T |  |  |  |  |  |  |  |  |  | 5 | Ae | R | 1 | Ai | R |  |  |  |
| *Cheyletus eruditus* | T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 18 | Ae | V |
| *Cheyletus malaccensis* | F |  |  |  | 2 | Ai | R | 1 | Ai | R | 1 | Ai | R | 3 | Ai | R | 1 | Ai | R |
| T | 768 | Co | E | 1095 | Co | E | 610 | Co | E | 48 | Ae | S | 486 | Co | E | 496 | Co | E |
| *Cheletomimus (Hemicheyletia) wellsi* | F |  |  |  |  |  |  |  |  |  |  |  |  | 2 | Ai | R |  |  |  |
| T |  |  |  |  |  |  |  |  |  | 169 | Co | E | 39 | Co | S |  |  |  |
| Cunaxidae | *Rubroscirus nidorum* | F |  |  |  |  |  |  |  |  |  | 9 | Ai | R | 2 | Ai | R |  |  |  |
| T |  |  |  |  |  |  |  |  |  | 65 | Co | S | 18 | Ae | R | 4 | Ai | R |
| Raphignatidae | *Raphignathus* sp. | T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 | Ai | R |
| Stigmaeidae | *Storchia pacificus* | T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | Ai | R |
| Tarsonemidae | *Tarsonemus granarius* | T |  |  |  |  |  |  | 1 | Ai | R |  |  |  |  |  |  |  |  |  |
| Tenuipalpidae | *Brevipalpus phoenicis* | T |  |  |  |  |  |  |  |  |  | 1 | Ai | R |  |  |  |  |  |  |
| Tetranychidae | *Tetranychus* sp*.* | F |  |  |  | 3 | Ai | R |  |  |  |  |  |  | 1 | Ai | R |  |  |  |
| T |  |  |  |  |  |  |  |  |  | 1 | Ai | R | 1 | Ai | R | 2 | Ai | R |
| Tydeidae | *Brachytydeus oregonensis* | T | 59 | Co | S | 17 | Ai | R | 1 | Ai | R | 23 | Ae | V | 25 | Ae | V | 29 | Ae | S |
| *Brachytydeus tuttlei* | T | 42 | Ai | S | 40 | Co | V | 28 | Co | S | 212 | Co | E | 107 | Co | M | 17 | Ae | V |
|  |  | **Total in feathers** |  | 248 |  |  | 2,225 |  |  | 1,650 |  |  | 9,254 |  |  | 9,143 |  |  | 5,879 |  |  |
|  |  | **Total in traps** |  | 1,648 |  |  | 2,550 |  |  | 1,293 |  |  | 1,520 |  |  | 1,880 |  |  | 1,093 |  |  |
|  |  | **Total specimens** |  | 1,896 |  |  | 4,775 |  |  | 2,943 |  |  | 10,774 |  |  | 11,023 |  |  | 6,972 |  |  |
|  |  | **Richness in feathers** |  | 5 |  |  | 7 |  |  | 5 |  |  | 7 |  |  | 10 |  |  | 4 |  |  |
|  |  | **Richness in traps** |  | 13 |  |  | 11 |  |  | 12 |  |  | 22 |  |  | 17 |  |  | 18 |  |  |
|  |  | **Total richness** |  | 13 |  |  | 13 |  |  | 12 |  |  | 23 |  |  | 18 |  |  | 19 |  |  |
|  |  | **ntraps** |  | 20 |  |  | 18 |  |  | 16 |  |  | 18 |  |  | 21 |  |  | 19 |  |  |
|  |  | **nfeathers** |  | 21 |  |  | 20 |  |  | 17 |  |  | 18 |  |  | 22 |  |  | 19 |  |  |

O: occurrence, where F-feathers; T-traps.

*C*: Constancy index, where Co-constant (species present in more than 50% of the samples); Ae- accessory (species present in 25 to 50% of the samples); Ai- accidental (species present in less than 25% of the samples).

*D*: Dominance where E- eudominant (≥10%); M- dominant (5≤10%); S- subdominant (2≤5%); V- eventual (1≤2%); R- rare (D<1%).

n: number of samples.