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Inhabiting Fruit Trees in Fayoum Governorate

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ABSTRACT

Survey of mite species inhabiting leaves, litters, debris and soil from different fruit trees in Fayoum Governorate through two years was carried out. One hundred and twenty-nine species belonging to seventy-two genera of twenty-eight families were evaluated. From which seventy-two species belonging to fourteen families of Prostigmata; forty-six species belonging to nine families of Mesostigmata; three species from family Acaridae of A stigmata and eight species belonging to four families of Cryptostigmata. The species: *Acaropsella rohdendorfi* (Cheyletidae), *Coleoscirus boptos*, *Dactyloscirus barkeri* and *D. ebrius* (Cunaxidae) were firstly recorded. Two species were considered to be new: *Typhlodromus citri* sp. n. (Phytoseiidae) and *Neoucunaxoides fayoumi* sp. n. (Cunaxidae). Description of all stages of the both mentioned two new species was done and all the biological aspects were studied. Various prey were offered for rearing *T. citri* sp. n.: eggs and immatures

of both *T. urticae* and *E. orientalis*, Immatures of *T. putrescentiae*, *R. robini*, *O. vitis* and *C. lanceolatisetae*. *E. orientalis* eggs found to be the most suitable and nourishing food giving a shorter life cycle, longest longevity, higher female fecundity and greatest consumption number (3.78 days, 45.16 days, 50.93 eggs/female and 969 prey eggs); respectively, than the other prey tested, while *O. vitis* was the lowest one. Neither immatures of *C. lanceolatisetae* nor both *T. putrescentiae* and *R. robini* allowing *T. citri* sp. n. to achieve its progress times. Individuals of *N. fayoumi* sp. n. were found in debris under several fruit trees. Many foods were used for rearing it as immatures of *T. putrescentiae*, *R. robini*, *O. mangiferus* and *C. pulcher*; eggs and immatures of *T. urticae*; adults of *C. kenyae* and egg-masses of *M. incognita* and *Collembola* sp. eggs and immatures. *T. putrescentiae* immatures was being the most favorable prey for *N. fayoumi* sp. n., which giving the shortest life cycle, prolonged longevity, greatest female fecundity and biggest number of prey consumption (16 days, 76.75 days, 55.55eggs/female and 761.16 individual); respectively, than other prey used. The predator *N. fayoumi* sp. n. refused to feed or completed its development, when feed on immatures of *R. robini*; eggs of *T. urticae* and adults of *C. kenyae* and both eggs and immatures of *Collembola* sp.

Key Words: Survey, *Typhlodromus citri* sp. n., *Neocunaxoides fayoumi* sp. n., description, life history, reproduction, feeding behavior.

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