



## Southern African osmiine bees: taxonomic notes, two new species, a key to *Wainia*, and biological observations (Hymenoptera: Anthophila: Megachilidae)

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### Abstract

Resulting from the examination of the type specimens of the southern African bee species originally described in the genus *Osmia*, the taxonomic placement of 19 species is formally established.

The following combinations are formalised: *Osmia atrorufa* Friese, 1913 to *Wainia (Caposmia) atrorufa* (Friese) comb. nov.; *Osmia ausica* Cockerell, 1944 to *Hoplitis (Anthocopa) ausica* (Cockerell) comb. nov.; *Osmia capicola* Friese, 1909 (replacement name for *Osmia capensis* Cameron, 1906) to *Capicola capicola* (Friese) comb. nov.; *Osmia flavipes* Friese, 1909 to *Afranthidium (Nigranthidium) flavipes* (Friese) comb. nov.; *Osmia forficulina* Cockerell, 1921 to *Hoplitis (Anthocopa) forficulina* (Cockerell) comb. nov.; *Osmia karoensis* Brauns, 1926 to *Hoplitis (Anthocopa) karoensis* (Brauns) comb. nov.; *Osmia mediorufa* Cockerell, 1932 to *Hoplitis (Anthocopa) mediorufa* (Cockerell) comb. nov.; *Osmia namaquaensis* Friese, 1913 to *Hoplitis (Anthocopa) namaquaensis* (Friese) comb. nov.; *Osmia natalensis* Cockerell, 1920 to *Wainia (Caposmia) natalensis* (Cockerell) comb. nov.; *Osmia neavei* Cockerell, 1936 to *Hoplitis (Anthocopa) neavei* (Cockerell) comb. nov.; *Osmia ogilviae* Cockerell, 1932 to *Hoplitis (Anthocopa) ogilviae* (Cockerell) comb. nov.; *Osmia ornatula* Cockerell, 1932 to *Hoplitis (Anthocopa) ornatula* (Cockerell) comb. nov.; *Osmia orthodonta* Cockerell, 1932 to *Hoplitis (Anthocopa) orthodonta* (Cockerell) comb. nov.; *Osmia pachycephs* Friese, 1922 to *Othinosmia (Megaloheriades) pachycephs* (Friese) comb. nov.; *Osmia piliventris* Friese, 1913 to *Hoplitis (Anthocopa) piliventris* (Friese) comb. nov.; *Osmia reginae* Cockerell, 1932 to *Hoplitis (Anthocopa) reginae* (Cockerell) comb. nov.; *Osmia rhodognatha* Cockerell, 1932 to *Hoplitis (Anthocopa) rhodognatha* (Cockerell) comb. nov.; *Osmia similis* Friese, 1909 to *Hoplitis (Anthocopa) similis* (Friese) comb. nov.; *Osmia turneri* Cockerell, 1937 to *Hoplitis (Anthocopa) turneri* (Cockerell) comb. nov.

The following new synonyms are established: *Hoplitis (Anthocopa) namaquaensis* (Friese) = *Osmia ausica* Cockerell syn. nov.; *Capicola capicola* (Friese) (replacement name for *Osmia capensis* Cameron) = *Capicola braunsiana* Friese, 1911 syn. nov., *Capicola aurescens* Cockerell, 1932 syn. nov., *Hesperapis turneri* Cockerell, 1934 syn. nov., *Hesperapis obscura* Cockerell, 1934 syn. nov.; Unlike the statement in Michener (2000: 403) *Osmia? capensis* Cameron, 1905 is probably not a synonym of *Capicola braunsiana* Friese given its body length. The type seems to be lost and the identity of this species remains unclear. *Hoplitis (Anthocopa) similis* (Friese) = *Osmia forficulina* Cockerell syn. nov.; *Wainia (Wainiella) sakaniensis* (Cockerell, 1936) = *Heriades albobarbatatus* Cockerell, 1937 syn. nov., *Heriades debilicornis* Cockerell, 1940 syn. nov., *Heriades perpolitus* Cockerell, 1947 syn. nov., *Heriades otaviensis* Cockerell, 1947 syn. nov.

The status of *Wainia (Caposmia) elizabethae* (Friese, 1909) spec. rev. as a valid species is restored.

*Hoplitis (Anthocopa) conchophila* Kuhlmann spec. nov., *Wainia (Caposmia) gessorum* Kuhlmann spec. nov. and the male of *Wainia (Caposmia) atrorufa* (Friese) are described for the first time. A checklist and an illustrated key to the seven southern African species of *Wainia* is provided.

Notes on known flower visiting and nesting of *Hoplitis (Anthocopa)* and *Wainia* are given under the relevant species.

**Key words:** *Hoplitis*, Osmiini, new combinations, synonyms, taxonomy, nomenclature, Afrotropical