

Phylogenetics of the *Pachydactylus capensis* species complex

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The *Pachydactylus capensis* species complex (*P. capensis*, *P. affinis*, *P. vansoni*, *P. tigrinus*, *P. oshaughnessyi*) has an extensive distribution in southern Africa. We aim to test species/population boundaries within the *P. capensis* clade, the major sub-group in this complex using appropriate or suitably large samples. Preliminary analysis based on sequence data from 16S rRNA indicated three major clades corresponding with *P. capensis*, *P. vansoni* and *P. affinis*. Within *P. capensis* there were two major groups, whereas in *P. affinis* there were two major groups and possibly as many as four species. Other molecular markers will also be employed to construct the phylogeny, and to determine genetic boundaries across the ranges of the various species taking habitat and ecology into consideration. Possible lineages within *P. vansoni* will also be studied. Findings will be used to update the taxonomy of the group in an evolutionary context as the existence of cryptic lineages is strongly suspected.