Two new species of *Aloe* from the Kingdom of Saudi Arabia

Introduction

The Kingdom of Saudi Arabia, situated in western Asia, is the largest country in the Arabian Peninsula, and is the home of many mysteries. Travel to and in the Kingdom has remained one of the most difficult in the world to arrange, due to it being basically closed off to outsiders other than those invited for some specific reason such as work, religious pilgrimage to the Islamic holy cities of Mecca and Medina, or other official reasons. This has led to a limited amount of exploration, research and discovery in many domains of natural history.

A major portion of the Saudi Arabia is composed of sand desert, with the Rub' al Khali being the largest sand desert in the world. However, in the southern and western parts of the country, there are several mountain ranges, some with peaks rising to almost 10,000 feet (3,000 meters) above sea level which, with their higher rainfall and more favorable climates, host diverse ecosystems. It is in these areas that most of Saudi's aloe species occur.

One of the authors (McCoy) has had the good fortune and opportunity to spend over twenty six years in Saudi Arabia, and to make innumerable trips into the field to study the aloes of this country. The other contributing author (Lavranos) has made two extended visits to the Kingdom. The result of these many journeys and explorations has led to the discovery of a considerable number of species of aloes previously unknown to both science and the outside world. The purpose of our ensuing paper is to formally describe yet two more members of this interesting genus.

From the south

The first of the two species to be dealt with here belongs to a group that occurs mainly in Arabia, the principal common characteristic of which comprises their possessing variously tomentose or hairy perianths. Best known within this group is perhaps, *Aloe tomentosa* Deflers from the Yemen, while other taxa exhibiting this trait include Aloe woodi Lavranos & I.S. Collenette or, in its most extreme case, the rare Yemeni endemic *Aloe lanata* T.A. McCoy & Lavranos.

Specimens of the new aloe here described were only recently (2012) noticed for the first time during one of McCoy's continuing searches for possible sites supporting succulent plant communities. From his first sighting of the new taxon, it was apparent that this was a distinct new species. Although superficially resembling *A. woodii*, the geographically nearest member of the group, some major physical characters at once served to distinguish the two. The new plants, although much smaller, grew in large clumps by the production of many offsets (Fig. 1), very unlike the usually solitary *A. woodii*. It was, moreover, markedly dissimilar in its narrow, yellow, only weakly hirsute, sigmoid flowers, quite unlike the densely tomentose, whitish, green striped, inflated perianths of *A. woodii* (Table 1). Another important ecological consideration, when comparing it with another potentially related taxon, *A. tomentosa* Deflers, is its substrate preference. Unlike *A. tomentosa*, which favors the Nubian sandstones and sheet lavas that overlay them, and which form a major part of the Great Arabian Escarpment in the south for its archetypal habitat substrate, the new aloe described here seems confined to small, free-standing granite outcrops, like those so often referred to as koppies, in Southern Africa.

1. The type specimen of *Aloe aaata* in bloom.