



CHANCE OF A LIFETIME!



21 September 2017

The Calitzdorp Succulent Society is proud to serve with the Garden Route Botanical Garden in George, South Africa to present an opportunity that rarely occurs. This is a fund raising venture designed to benefit the Garden Route Botanical Garden Trust.

The manager of the Herbarium at the Garden is Priscilla Burgoyne. She is one of South Africa's premier botanists.

Priscilla has discovered a new plant, heretofore unknown to botanical science. The plant's discovery has been duly recorded, but it has not been named. *This is your chance to name a unique species.*

This plant is one of those iconic African plants that occur in the veld. It is a parasite that is geophytic in nature, in that it grows primarily underground on the roots of other plants. What we see is the flower of the plant as it pushes up out of the soil in order to reproduce. There is no chlorophyll in the exposed flower, it gets its growing energy from the plant that it is parasitizing.

This plant belongs to a family with a very interesting history. First placed in Raffleziaceae, a family containing the largest flower on Earth (*Rafflesia arnoldii*) it was later moved into a family of its own, *Cytinus*, due to molecular evidence (Nickrent, 2007). The group are plant parasites with bright red or yellow flowers. Our particular plant was discovered while doing the comparisons of measurements between species of this genus for a publication of a key to the *Cytinus* genus (Burgoyne, 2006) and it was found that some herbarium specimens did not match the measurements given. Specimens of this species were searched for on numerous field trips and only in 2011 was a type specimen found. This plant produces an abundance of nectar in nectar pockets and this lures pollinators as a reward for pollinating the plant. Pollinators of its nearest family members include rodents, Elephant shrews (Johnson *et al.* 2011, the first time this suite of pollinators has been found for a parasitic plant) and sunbirds (Hobbhahn & Johnson, 2015). This particular plant differs from its relatives by being much more robust in size and has a longer flower than its nearest relatives and has oblong stigmatal and antheridial columns with intricate tips with projections on top. It is a very bright red when ready for pollination. Plants can only be seen when in flower and rainfall determines if this happens.

The right to name this plant species will be determined by auction. The highest bidder for the right to name the plant will be allowed that chance. The

auction is being held on Bid or Buy with the final bid accepted 12 October, 2017 at 1530 CAT.

The name, while at the option of the winning bidder, must conform to certain botanical Latin rules. The Herbarium will assist the winning bidder in formatting the name to adhere to the norm.

The Garden Route Botanical Garden Trust will undertake to publish the new species in a recognised, peer-reviewed journal after the name has been chosen by the highest bidder.

Garden Route Botanical Garden and Calitzdorp Succulent Society are not for profit organizations.

The Bid or Buy auction is being held under *Cytinus* - ***NAME THE PLANT***.



Cytinus sp.



Cytinus sp. Male Flower

See: www.vetplant.co.za for more information

References:

Burgoyne, P.M. 2006. A new species of *Cytinus* (Cytinaceae) from South Africa and Swaziland, with a key to the Southern African species *Novon*, 16 (2006), pp. 315-319

Hobbhahn, N & Johnson, S.D. 2015. Sunbird pollination of the dioecious root parasite *Cytinus sanguineus* (Cytinaceae). *South African Journal of Botany* 99: 2015, 138-143.

Johnson, S.D. , Burgoyne P.M. , Harder L.D. , & Dötterl, S.. 2011. Mammal pollinators lured by the scent of a parasitic plant *Proceedings of the Royal Society B: Biological Sciences*, 278: 2303-2310.

Nickrent DL.2007. Cytinaceae are sister to Muntingiaceae (Malvales). *Taxon* 56:1129–1135.