

WHAT FLOWER IS THAT?

A saprophytic fungus at Kirstenbosch

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What is this bizarre plant, looking like an upside-down octopus? It is brilliant red, it has no leaves or stems and it appears straight out of the ground. You walk closer to investigate this red octopus flower. Curiosity drives you to touch its beautiful petals but they break off. 'So soft and fragile' you think and you bring a piece closer to your nose to smell. Phooe! It smells horrible. Disgusted you slowly start to walk away and begin to wonder. How could such a beautiful flower smell so awful? What is it really? Where does it come from? Why is it here?

What you have just observed my friend is in fact not a flower of any sort although it serves the same function of a real flower.

Yes indeed, it does resemble a upside down octopus. The octopus flower is actually a fungus. This one is called *Anthurus archeri*, and it is well known for secreting an undesirable odour like decaying meat or fish - hence the common name of cuttlefish fungus.

Anthurus archeri falls in the group Basidiomycetes, and the order Gastromycetales. These are saprophytic fungus species that can often be seen growing in fields and woodlands. They thrive on decaying matter like wood. Basidiomycetes are also known as mushrooms, toadstools, puffballs, bracket-fungi and stinkhorns, each with

its own distinct form from which the common names are derived.

Anthurus archeri, the cuttlefish fungus, is one of the larger saprophytic fungi. Its unmistakable red arms that open upon maturity is characteristic of it's sort. The peridium (a little pouch of spore bearing tissue) can reach up to 5 cm high and is 3.2 cm wide. It is globose, or oval, white and splits irregularly at the apex where it is attached by means of stout, white, much-branched mycelial cords to tree roots. The peridium is usually single but two to three closely adressed eggs may be attached to one rooting system. The receptacle is composed of a short stalk-like base, flared at the margin, but attenuated toward the point of attachment to the

fused and organically united at the tips and on the inner side on which the spore mass is born.

The stem is 1-5 cm long, about 2.5 cm wide at the upper margin, hollow, brittle and made up of spongy cellular walls of one to two layers of cells which occasionally open towards the outside. The stem is white at base and reddish above. Arms are up to 14 cm long and 2 cm in diameter at the widest part. The spore mass is greenish black, borne on the inner side of the arms, at first distributed but later concentrated in patches. The spores are embedded in a gelatinous material having a strong foetid odour of decaying meat. This odour attracts flies, beetles and other carrion-eating insects that successfully

distribute spores on their bodies and so secures the survival of the fungus.

Anthrus occurs in wooded places, often under oak trees, occurring singly or in clumps, appearing after rain and is thus more commonly noticed in the winter and early spring.

They are often mistaken for bright red flowers when growing in clusters which can be an impressive sight. They are found in South Africa, Tasmania, New Zealand and Australia.

Look out for it when you next visit Kirstenbosch in the early spring. 🍄



Anthurus archeri, the cuttlefish fungus.

volva (the hyphal sheet enclosing the whole of fruiting body). The fruit body ruptures upon enlargement but remains as a cup or pouch around base of stipe. The volva then eventually divides at the apical margin into four to six long, sub-cylindrical, reddish arm-like processes that are originally touching but not