



# Ex situ monitoring van *Frithia humilis* Burgoyne: 'n Kontrolo studio vir 'n translokasie projek

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**Ex situ monitoring of *Frithia humilis* Burgoyne: A control study for a translocation project.**

*Frithia humilis* was listed on the South Africa Red Data List as endangered in 2009. This is due to pressures exerted on its limited habitat by mining activities and climate change. Only nine localities still exist and are associated with felsite and underlying coal deposits. When the locality of a sub-population of 4000 plants became threatened by coal mining activities, the plants were translocated to suitable habitats. Approximately 1000 plants were distributed to botanical gardens for *ex situ* conservation purposes, which included the garden of the North-West University. The purpose of the monitoring project was to determine and compare the survival rate of *ex situ* material with that of *in situ* populations. Thus far it has been established that *ex situ* populations are more stable, although the *in situ* population numbers show better fecundity.

*Frithia humilis* word op die 2009 Rooidatals vir plante aangedui as *endangered* [bedreig]. Hierdie assessering is gegrond op die druk wat mynbou-aktiwiteite en klimaatsverandering uitoefen op hierdie endemiese spesie se beperkte habitat. Slegs nege lokaliteite, vanaf Bronkhortstspruit in Gauteng tot in Middelburg, Mpumalanga, bestaan nog. Dit is geassosieer met felsiet sandsteen en onderliggende steenkool neerleggings. Weens laasgenoemde se ekonomiese belang was een van hierdie lokaliteite in 2009 onwetend ge-oogmerk vir mynbou en is die sub-populasie van 4000 individue getranslokeer na 'n ander geskikte habitat. 'n *In situ* projek is tans verantwoordelik vir die monitering van hierdie plante. Ongeveer 1000 plante is na verskeie botaniese tuine in Suid-Afrika uitgeplaas as 'n addisionele bewarings maatstaf. Die doel van die *ex situ* monitering van *Frithia humilis* in 'n glashuis by die Noordwes-Universiteit se botaniese tuine is om meer oor die post-translokasie oorlewingssukses van die plante te wete te kom en om sodoende te bepaal of die getranslokeerde *in situ* bevolking beter of slegter daaraan toe is. Om die oorlewingssukses van die plante *ex situ* te bepaal, is daar vir ses maande gereeld tellings gedoen van die aantal lewende en dooie plante, die aantal lewende en dooie blare, blomme en vrugte per plant. Voorlopige resultate toon dat die *ex situ* bevolkingsgetalle meer stabiel is as dié van die *in situ* bevolking, maar laasgenoemde se plante toon beter voortplantingsukses as die *ex situ* plante.

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