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Ondetia, the problematic cousin of "Vermeerbos"

Poisonous plants constitute an important agricultural problem. Isolation of toxic properties is a difficult task and a number of other factors, e.g. the age of the plant, where it is growing, what it is growing on, the time of the year, rainfall, or other local conditions play a role and may result in varying toxic levels.

A few authoritative and comprehensive guides for farmers and agriculturists in southern Africa have been produced, but some potentially important Namibian plants are not included, e.g. *Ondetia linearis*, a yellow-flowering herb that resembles the notorious "vermeerbos".

Ondetia linearis

An unpublished paper by Dr. Rina Grant, (a veterinary surgeon with a particular interest in toxic plants, who previously worked in Namibia), states that *Ondetia linearis* may cause nitrate poisoning as both the leaves and flowers contain high concentrations of nitrates. Unfortunately no details are given on the numbers of stock loss or year of occurrence or area, but it appears that it was a problem in the Otjiwarongo district in the late seventies.

Herbarium records show that in 1987, a Bethanien farmer lost 12 sheep over a period of 24 hours. Numerous flower heads were found in the stomachs of the dead animals.

Although records of poisoning by *Ondetia* are rare, this may be due to incorrect identification of the plant. If a problem with *Ondetia* is suspected, proper identification of the plant by the National Herbarium is advised.

Not only will accurate identification allow correct treatment (according to Vahrmeijer's Poisonous Plants of Southern Africa, nitrate poisoning can be treated by an injection), but the information will be recorded for future reference and use.

Identification:

It requires more than a glance to see the differences between *Ondetia linearis* and some *Geigeria* species. Basically *Ondetia* is a herb that never becomes woody. On the other hand, *Geigeria* plants become woody even when annuals and their woody inflorescences are conspicuous even in the dry seasons. The main differences are in the flower shape and number of bracts. A noticeable characteristic of *Ondetia* plants is that the remains of an old flower head (out of which the new plant germinates) is often seen at the top of the root. It has been recorded as being aromatic, and the smell has reminded collectors of some *Geigeria* species.

Ondetia linearis

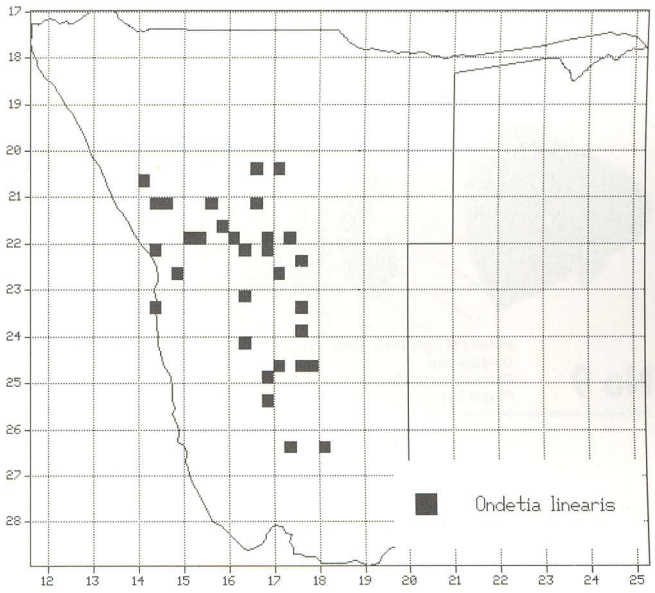
Geigeria ornativa (Vermeerbos)

Common name:

There are no published local names for *Ondetia,* which usually implies that it has no specific uses or value. The name **omuguendu** is however found on one herbarium specimen.

Distribution :

Ondetia is endemic to Namibia (i.e. it is found only in Namibia). The map, drawn from the collection housed in the National Herbarium, indicates that it is fairly widely distributed in the central parts.



Ondetia linearis was fairly common in the Erongo region this past rainy season and noticeable because (as one farmer said) "it looked like **vermeerbos**, but was just a bit different". It was the first season that many people noticed it. This may be due to the fact that conditions favoured it this season or because it was growing on disturbed ground, e.g. beside farm roads and in greater numbers than normal.

Vermeerbos

Seventeen species of the *Geigeria* genus are known to occur in Namibia and "vermeersiekte" occurs when ruminants ingest some of these species under certain conditions. Although *Geigeria ornativa* causes the most problems, *Geigeria pectidea* and *Geigeria plumosa* are also toxic. Due to the fact that **vermeerbos** is so notorious and easy to recognise, the plants are seldom sent to the herbarium for positive identification. This is unfortunate as we would like to positively identify harmful plants. One questions whether it is due to limited knowledge that only these three *Geigerias* are known to be toxic while the others are harmless.

Value

There are times when *Geigeria ornativa* can be grazed without any harmful effects. Other related species have been used for medication, e.g. *Geigeria schinzii* subsp. *schinzii,* which occurs in the north-central regions, was previously used as protection against rabies and tea made from the leaves was given to babies with tetanus to relax them. In the Okakarara area the stems of a *Geigeria* species are said to be roasted and ground and used to treat wounds (Kakujaha-Matundu, 1996).

Common names:

Besides **Vermeerbos** *Geigeria ornativa* is known as **Speikraut, ondetu** or **okapuite** (Herero) and **ongonyo, eengongo** (plural) (Wambo). *Geigeria acaulis* is called **omuti nozongombo** in the Kaokoveld .

Methods of control:

Controlled grazing systems are reported to help decrease the problem.

It is essential for farmers to know which poisonous plants occur on their farms and where they grow. The National Herbarium of Namibia welcomes any additional information and readers are invited to make contributions to our knowledge. Distribution maps of the seventeen *Geigeria* species occurring in Namibia have been compiled from herbarium records and are available at the Herbarium.
The National Botanical Research Institute of Namibia is situated at 8 Orban Street Windhoek.

Additional reading and references:

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