

# BIOPIRACY UNDER FIRE:

The Pelargonium Patent Hearing



A Briefing Paper by the African Centre for Biosafety

Mariam Mayet, January 2010

## Contents

Acronyms	3
Introduction	4
Structure of briefing	5
Overview of key issues for patent hearing	6
The <i>Pelargonium</i> value chain in South Africa	9
Decimation of the <i>Pelargonium</i> in the wild	10
Moratorium and illegal harvesting	10
Benefit sharing with local communities?	12
Schwabe's profits on Umckaloabo	12
Schwabe's Bioprospecting applications in South Africa	18
National and international protection of the species	19
Conclusion	19
References	20





© The African Centre for Biosafety 2010

PO Box 29170, Melville 2109, South Africa

Tel: (011) 486 2710

Fax: 011 486 1156

[www.biosafetyafrica.net](http://www.biosafetyafrica.net)

Design and layout: Adam Rumball, Sharkbuoys Designs, Johannesburg

Cover photograph: ACB Researcher

The African Centre for Biosafety (ACB) is a non-profit organisation, based in Johannesburg, South Africa. It provides authoritative, credible, relevant and current information, research and policy analysis on genetic engineering, biosafety, biopiracy, agrofuels and the Green Revolution push in Africa.

### **Acknowledgements**

This publication has been made possible as a result of the generous support of Oxfam Novib and Swedbio. The ACB also extends its gratitude to Collectif Biopiraterie in France, for their invaluable assistance with the work on Schwabe's profit margins. Special thanks are due to the Eastern Cape Provincial Department of Economic Development and Environmental Affairs (DEDEA) for their tireless work in trying to protect resources in South Africa. Heartfelt gratitude to Mr Quintus Hahndiek from the DEDEA for his assistance in providing us with an affidavit from which the work under dealing with the illegal and unsustainable harvesting of the pelargonium and the status of the species in the wild in the Eastern Cape has been drawn.

## Acronyms

BABS	Bioprospecting Access and Benefit Sharing Regulations
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species
DEAT	Department of Environmental Affairs and Tourism (South Africa)
EPC	European Patent Convention
EPO	European Patent Office
MCPA	Masakhane Community Property Association
PAIA	Promotion of Access to Information Act
SANBI	South African National Biodiversity Institute
TOPS	Threatened or Protected Species Regulations

## Introduction

On the 25th and 26th January 2010, the ACB will give evidence at a hearing at the European Patent Office (EPO) in Munich, Germany. The hearing concerns a patent challenge by the ACB on behalf of a rural community in Alice, South Africa, in collaboration with Swiss NGO, the Berne Declaration. The patent being challenged is one granted to Dr. Willmar Schwabe GmbH and Company ('Schwabe') by the EPO on the 26th September 2002. The patent is in respect of a method for producing extracts of *Pelargonium sidoides* and *Pelargonium reniforme* to make Schwabe's blockbuster cough and colds syrup, **Umckaloabo**. The main claim in the patent is in respect of a procedure (percolation and maceration) for the production of an extract from the pelargonium using an aqueous-ethanol solvent (10-92% ethanol). This procedure is not only commonly used in the phytomedicine sector but also has for eons been used by traditional healers from the Alice and other communities in South Africa. The effect of the patent is to give Schwabe the exclusive right in the countries that are parties to the European Patent Convention (EPC) over the next 20 years, to make, sell or import/export the active ingredients of the pelargonium roots that have been extracted by water and alcohol.

The patent challenge is one of four challenges by the ACB and Berne Declaration in respect of patents granted to Schwabe using the Pelargoniums. The Patent is also challenged by two Swiss companies, Frutarom and Alpanimed, and German company, Finzelberg.

The ACB and Berne Declaration are represented by Dr. Fritz Dolder, a highly experienced patent lawyer, who has represented Dr. Vandana Shiva and others, in successfully challenging a patent in 2005 on a fungicide made from the neem tree.

## Structure of briefing

In this briefing, we provide an overview of key issues for the patent hearing. These are drawn from the papers filed with the EPO by Dr Dolder on behalf of the ACB and Berne Declaration, Schwabe's response and the preliminary findings of the Opposition Division of the European Patent Office (EPO). We also provide an overview of the situation in South Africa concerning the *Pelargonium* species and the community we represent. In this regard, we provide pertinent information concerning the utilisation of the *Pelargonium* species, highlighting the extent of the decimation of both species and illegal harvesting. We also provide information of the players involved in the harvesting and trade in the species, and valuable data on Schwabe's profit margins. Finally, we deal with issues concerning the bioprospecting permit applications made in South Africa by Schwabe.

*Pelargonium sidoides* and *Pelargonium reniforme* are medicinal plant species endemic to the South African region. Both species have similar medicinal properties (active compounds called Coumarins) and are collected together, as they are similar and can only be distinguished from each other during flowering. *Pelargonium reniforme* has pink flowers and those of *Pelargonium sidoides* are dark purple, almost black.



*Pelargonium sidoides* growing wild



*Pelargonium sidoides* in flower

## Overview of key issues for patent hearing

The following legal documents are germane to the hearing, translated from the German by a sworn translator of the Supreme Court of South Africa:

1. **Notice of Opposition filed by Dr Dolder, on behalf of the ACB and Berne Declaration, dated March 2008;**
2. **Response by Dr. Willmar Schwabe dated 18 December 2008;**
3. **Summons and Status and Applications issued by the European Patent Office, dated 14 July 2009;**
4. **Reply filed by Dr Dolder, on behalf of the ACB and Berne Declaration, dated 24 November 2009.**

These documents can be downloaded from the ACB's website at [www.biosafetyafrica.org.za](http://www.biosafetyafrica.org.za)

Key points can be summarised from the documents as follows:

1. **The Notice of Opposition** sets out the grounds of ACB and the Berne Declaration's opposition, supported by the affidavits of Dr. William Stafford and a traditional healer from the Alice community, Milile Rwexu. The opposition seeks revocation of the patent in its entirety, based on the following:
  - (a) Schwabe did not comply with the Convention on Biological Diversity's (CBD) requirements that it obtain the prior informed consent from the traditional knowledge holders from South Africa prior to accessing the genetic resources and its associated traditional knowledge. Additionally, Schwabe had failed to share the commercial and other benefits with the providers of the resources and the traditional knowledge on mutually agreed terms. Article 5 of the European Patent Convention (EPC) prohibits patents which are contrary to public order. Non-compliance with laws would be an example of an act that is contrary to public order;
  - (b) Schwabe cleverly obtained a patent that allows it to control the entire trade in Europe through the exclusive use of a common and cheap extraction method. The result of this is the same as if Schwabe had obtained a patent on the plant variety itself. Patents on a plant variety are expressly prohibited by the EPC, rendering Schwabe's patent legally untenable;
  - (c) Schwabe has obtained a patent on an extraction method that lacks novelty as it does not amount to an inventive step, as required by the EPC. Indeed, the extraction method claimed is one used traditionally by members of the Alice community as well as being a method commonly used in the phytochemical and phytomedical fields.
2. **Schwabe's response** is comprised of 36 pages. The salient issues raised by it include the following, drafted in rather a condescending and smug manner:
  - (a) That the extraction method patented is novel and constitutes an inventive step on its part in that it constitutes, overall, an improved process. That this improved

process produces higher yields of the extracted compounds; higher total phenol content; constant total coumarin content; pronounced and improved antioxidative potential and so forth.

- (b) Schwabe dismisses allegations of non-compliance with the CBD and 'biopiracy' arguing instead that biopiracy is not a problem of patent law but a result of the conditions that exist in third world countries.
- (c) It points out its voluntary disclosure of the geographical origin of *Pelargonium sidoides* and infers that such disclosure points to an absence of biopiracy.
- (d) South African law regulating access and benefit sharing only came into effect on the 1 April 2008, and that it was not obliged to enter into any benefit sharing agreements on mutually agreed terms prior to this time. That it had immediately set upon making such application in terms of these regulations (for a bioprospecting permit) once these South African laws had come into effect.
- (e) That the patent is of benefit to South Africa as the donor country of the resources because the research activities of Schwabe are a prerequisite for the approval of medicines and therefore for marketing in most countries.
- (f) Schwabe has instituted several benefit sharing measures including:
  - (i) sustainable and responsible collection of *Pelargonium sidoides* based on valid collection permits to ensure the long term survival of the plant in its habitat;
  - (ii) creating a sustainable and significant income for the communities collecting *Pelargonium sidoides*;
  - (iii) creating know-how and sustainable income in South Africa through controlled cultivation; and
  - (iv) research projects with partners in South Africa.
- (g) Export of the *Pelargonium* is lawful and takes place in terms of valid export permits.
- (h) Schwabe monitors the sustainability of its operations in South Africa through commissioning of independent surveys monitoring the *Pelargonium* populations and monitoring the socio-economic effect of collecting *Pelargonium* in the wild and that these studies are available.
- (i) Persists in its claim as to novelty and inventiveness.

**3. The Summons and Status and Applications issued by the European Patent Office** sets out the preliminary opinion of the Opposition Division. The important findings include the following:

- (a) The prohibition of patents of the EPC that are contrary to public order is not confined to non-compliance with laws or regulations but also includes the protection of the environment. Inventions that are likely to seriously jeopardise the environment, if implemented, would constitute a valid exclusion from patenting on the grounds that such conduct violates public order.
- (b) Calls upon Schwabe to provide proof that the sustainability of its actions (harvesting and exporting of the *Pelargonium* from South Africa) is monitored and that various benefit sharing measures have been taken, even though the relevant South African law has only been enacted in April 2008.





Close up of  
*Pelargonium* grown at  
the Imingcangathelo  
Pelargonium Project

Photograph: ACB Researcher

- (c) Calls upon the ACB and Berne Declaration to provide proof that the use of the *Pelargonium* by Schwabe is likely to seriously harm the environment, or contravenes generally accepted codes of conduct in South Africa to this effect.
- (d) Issues relating to prior art, novelty and inventive steps required further inputs, and assessment.

**4. Reply filed by Dr Dolder, on behalf of the ACB and Berne Declaration, 24 November 2009** introduced the following new pertinent information:

- (a) That both *Pelargonium* species were categorised as protected flora pursuant to the Ciskei Nature Conservation Act, in respect of which a license was required for harvesting;
- (b) The commercial implementation of the patent by Schwabe resulted in a threat to nature and the environment in the Eastern Cape, prompting the Eastern Cape conservation officials to place a moratorium on authorisations for collecting and trading in the two *Pelargonium* species; and
- (c) Submission of an affidavit by Dr William Stafford dealing with prior art, novelty and inventiveness.

## The *Pelargonium* value chain in South Africa

*Pelargonium sidoides* and *Pelargonium reniforme* have historically grown naturally in the wild, only in South Africa and Lesotho. There are high concentrations of both species in the Eastern Cape area. Both the said species are harvested locally for traditional medicinal use. The species are also harvested by local people for the purposes of selling these to various intermediaries, who in turn, transport the *Pelargoniums* to the Western Cape, from whence they are exported out of the country. The ACB has been able to ascertain that the *Pelargonium* species are harvested, traded and exported and describe this as follows:

- a. To date, the two main middlemen Roy Gower of Gowar Enterprises and Mr Landu who act in partnership, purchase harvested *Pelargonium* material from rural unemployed people at a pittance – only 2-4 Rands per kg (18-36 Euro Cents per kg). Gowar and Landu store the harvested *Pelargonium* material at a warehouse owned by Gowar on Gowar's property in Grahamstown, until enough harvested roots are collected to make up a truck load. The truck load is then transported to Parceval Pharmaceuticals in the Western Cape. Mr Gower sells the material at R40 per kg (€3.67 per kg) to Parceval.
- b. Parceval Pharmaceuticals Pty. Ltd. is based in Wellington in the Western Cape, South Africa and is a registered proprietary limited company in terms of the laws of the Republic of South Africa.
- c. The *Pelargoniums* are also sold to Parceval's exporter, BZH Export and Import CC based in Hermanus, Western Cape. BZH also acts as a go-between Mr Gowar and Parceval.
- d. Thereafter the *Pelargoniums* are exported to Europe by the said Parceval and/or BZH Export, (who acts on behalf of Parceval) to Schwabe Pharmaceuticals. Schwabe Pharmaceutical uses the imported *Pelargoniums* for the production of a coughs and colds medicine called Umckaloabo.
- e. As at 26 December 2007, Schwabe was a shareholder of the said Parceval, owning 74% of the said Parceval's shareholdings.
- f. Several middlemen and local handlers involved in the *Pelargonium* trade such as Mr. Landu, Mr. Gowar and Mr. Paulsen have been arrested for contravention of various provincial laws. The following is pertinent in this regard:
  - (i) During the period 2002 and 2003, Mr Paulsen was found guilty in the Peddie court for harvesting flora without a permit, including *Pelargonium* protected under the Ciskei Act;
  - (ii) Mr Gowar was charged for having approximately 350 bags of *Pelargonium* on his property without any documentary approvals as required by law;
  - (iii) Mr Landu has recently been charged for forging permits to collect *Pelargonium* in the Ciskei, but the case has not yet gone to trial.

Taking the seasons (8-10 months of harvest per year) into account, information at the disposal of the ACB indicates that about 1280 tons of *Pelargonium* roots (332, 8 million plants) have been exported from the Eastern Cape to Parceval and in turn to Schwabe over an 8 year period between 2000-2008.

## Decimation of the *Pelargoniums* in the wild

The *Pelargonium* roots are harvested approximately 8-10 months of the year and 160 000kg of plants are harvested annually (4, 16 million plants). This means that more than 1280 000kg (332, 8 million plants) were uprooted over a period of 8 years, between 2000 and 2008. This took place in the absence of the requisite resting periods in between harvesting to allow for the regeneration or recovery of the plant populations. The continuous harvesting of the two species, which sprout after the rains, means that the species do not have a prolonged rest period and all remnants after the initial harvesting are immediately harvested again, thereby decimating the populations.

Between 2000 and 2008, approximately 7 arrests occurred, involving illegal activities concerning the harvesting, storing, transporting and use of *P. sidoides* and *P. reniforme*. Several of these arrests included the arrests of Landu, Mr Paulsen, Mr Gowar and several elderly women engaged directly in harvesting the *Pelargonium* plants. During 2002/2003, Paulsen was found guilty and fined for illegally harvesting numerous plant materials (including the *Pelargonium* species) in the Peddie area in the Eastern Cape, in contravention of the Ciskei Act which prohibits the illegal collection of plants without a permit.

As a result of various illegal and/or unsustainable wild harvesting activities of the said *Pelargonium* taking place in the Eastern Cape to meet the ever growing demand for the roots, there are virtually no *Pelargonium* plants left in the Grahamstown area as these have been completely decimated. Many farms, municipal commonages and land under the control of the South African Defence Force have been stripped repeatedly of both species to such an extent that the possibility of re-growth and regeneration has been severely retarded. The South African Defence Force land and the municipal commonages each comprise approximately 7000 hectares, and thus a minimum of 14000 hectares have been stripped bare of the *Pelargoniums*.

### Moratorium and illegal harvesting

In 2007, the non-compliance with provincial laws, permit conditions, as well as uncontrolled wild harvesting in the Eastern Cape, prompted the government to place a moratorium on all harvesting of *P. sidoides* and *P. reniforme*. Thus all harvesting of the *Pelargoniums* that took place after the 30th June 2007 in the Eastern Cape region has been illegal. The ACB has been able to ascertain that no new permits for wild harvesting have been issued in the Eastern Cape after this period.

Various harvesters and middlemen who handle the *P. sidoides* destined for export have been arrested for non-compliance with permit conditions, illegal harvesting or permit forgery. The ACB has found out that three arrests were made after the said moratorium was imposed. On the 23 October 2007 a minibus and trailer, packed to capacity with *Pelargonium* plant material – consisting of 34 bags of 30kg each – and under the control of Landu, were confiscated. Upon investigation, it was discovered that the said material was destined for a warehouse on private premises in Grahamstown, belonging to Gowar. At the warehouse, even more harvested *Pelargonium* roots were discovered in storage for sale to Parceval in the Western Cape.

Photographs taken of the minibus and trailer at the time of confiscation, and also depicting the warehouse where the *Pelargoniums* were stored.

(Photographs provided by Quintus Hahndiek, Sub-regional manager Settlers District Grahamstown within the Provincial Department of Economic Development and Environmental Affairs.)



Arrests connected to an illegal harvest in 2007



Illegally harvested *Pelargonium* found in the Gower warehouse

The ACB has learnt that the confiscated materials consisted of fresh plants (indicating fresh harvesting), comprising of two week's worth of harvesting. The quantity of illegal roots found in the minibus and on the premises amounted to 392 bags, each weighing 30kg. Approximately 26 plant roots make up one kilogram. The total confiscated material thus amounted to 11 760kg of *Pelargonium* roots, or 305 760 plants.

## Benefit sharing with local communities?

The average price paid by the said Landu and Gowar to local harvesters is a pittance, namely between R2/kg-R4/kg (18-36 Euro cents), which may amount to an average of R200/month (€18.53). Mr Gowar sells the said roots at R40/kg (€36,7/kg) to Parceval and/or BZH thereby making huge profits. The harvesting of the *Pelargoniums* involves back breaking labour. As a result of the overharvesting, local harvesters are forced to traverse large distances in search of the plants. Roots are dug out from deep under of the ground. Payment to the labourers per kilogram clearly constitutes exploitation by means of cheap labour.

## Schwabe's profits on Umckaloabo

The ACB has undertaken a study to assess the profits made by Schwabe with regard to the sales of Umckaloabo by assessing the profit margin made on a 100ml bottle of Umckaloabo and in this regard, also the cost of the raw material, extraction, manufacturing, packaging and distribution. The study found that Schwabe makes a €11.60 profit on a 100ml bottle of Umckaloabo, or 77% of the price paid by the final retailers for this product.

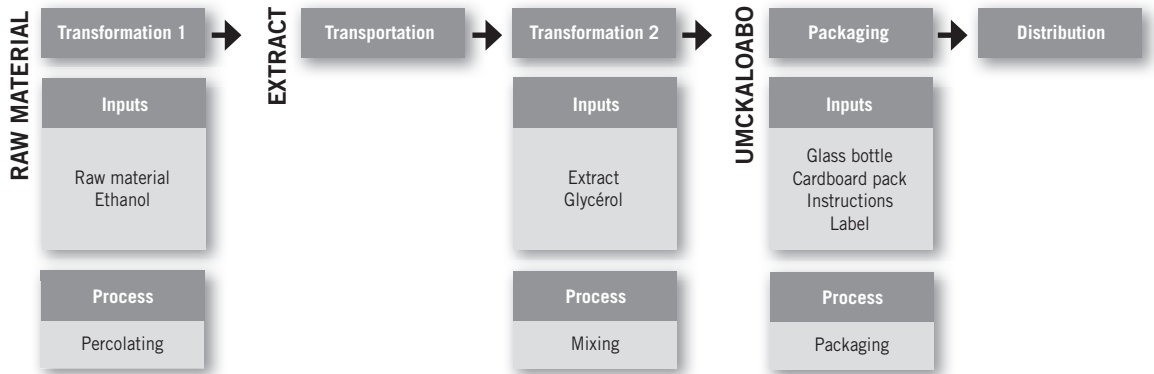
The total price paid to its South African suppliers of the raw *Pelargonium* roots (Parceval) to produce one 100ml bottle is estimated at €0.83, based on the current market price. However, as Schwabe is a bulk purchaser of these roots, the real price paid to Parceval might well be lower than this estimated amount, pushing up Schwabe's profit margin on Umckaloabo. Almost all of Parceval's stock of *Pelargonium* comes from wild harvesting. Harvesters, mainly from communities that hold traditional knowledge on these species, are paid only €0.0058 for the raw material needed to produce one 100ml bottle of Umckaloabo, equalling 0.17% of Schwabe's total costs of producing such a bottle. As this amount is so little – at a fraction of 1% – Schwabe is in fact not sharing any of the benefits gained from producing and selling Umckaloabo with local communities in South Africa.

### Assesing Schwabe margin on Pelargonium

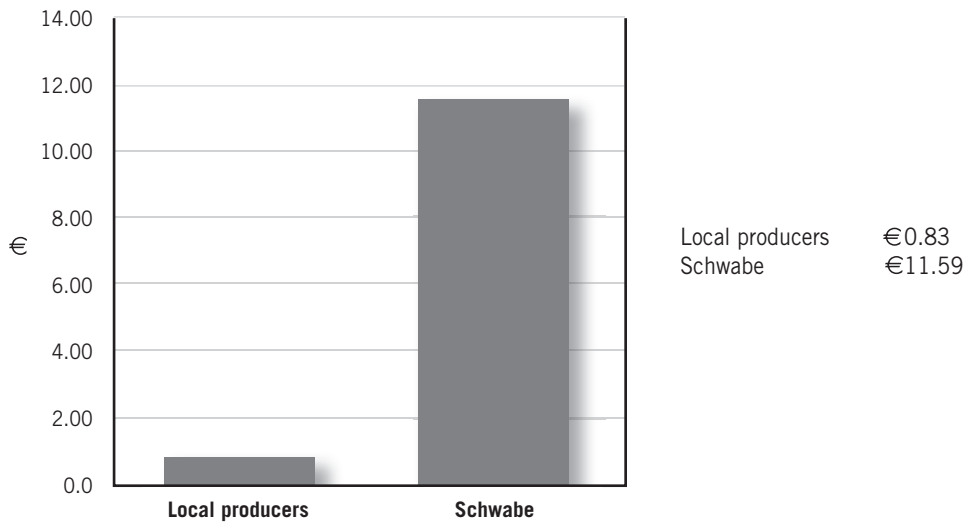
Matthieu Mellul/Collectif Biopiraterie, November 2009

This work aims to assess the margin made by Schwabe on selling Umckaloabo. The graph below shows the production process based on the Schwabe patents on Umckaloabo.

#### Production steps



#### Earnings for a 100ml bottle of Umckaloabo



The work below depicts the cost of each step in the process based on relevant market data, to produce 100ml of Umckaloabo, as well as the Schwabe's profit margins.

### Deconstruction of the price of a 100ml bottle of Umckaloabo

Datas	Value
<b>Costs</b>	
<b>Raw material</b>	
Dried roots	0.83
<b>Other material</b>	
Glycerol	0.04
Estimated raw material cost	<b>0.87€</b>
<b>Manufacturing</b>	
<b>Inputs</b>	
Aqueous ethanolic solvent (ethanol)	0.67
<b>Process</b>	
Percolation	0.36
Mixing	0.60
Estimated cost of manufacturing	<b>1.63€</b>
<b>Packaging</b>	
<b>Inputs</b>	
Glass bottle	0.50
Cardboard box	0.40
Instructions	0.20
Label	0.10
<b>Process</b>	
Packaging	0.20
Estimated cost of packaging	<b>0.90€</b>
<b>Distribution</b>	
Transport	0
Estimated cost of distribution	<b>0€</b>
<b>Estimated total costs</b>	<b>3.41€</b>
<b>Incomes</b>	
<b>Estimated price paid by final consumers ATI</b>	<b>30€</b>
Retail Margin	15
<b>Estimated margin for Schwabe</b>	<b>11.59€</b>

77%

## Calculations

### Conversion values

1KG	=	975ml
1g	=	0.98ml
1ml	=	1.03g
1R	=	0.09€

### Composition of a 100ml bottle

Pelargonium extract	80ml
Glycerol	20ml

### Raw material cost

#### Dried roots

Qty of extract in a 100ml bottle	80ml
Estimated qty of dried roots for 1ml extract	0.92g
Qty of dried roots for a 100ml bottle	73.8gm
Estimated price paid to the producers by kg	11.3€
Dried roots in a 100ml bottle	0.83€

#### Glycerol

1kg	=	2€	=	975ml
1ml	=	0€		
20ml	=	0€		

### Manufacturing cost

#### Percolation

Qty of ethanol needed	=	90%		
74gm dried roots	=	72.5ml	=	10%
90% ethanol	=	652.5ml		

#### Cost of the ethanol

1KG	=	1€
1ml	=	0€
652.5ml	=	0.67€

#### Cost of processing

25KG	=	12€
0.98ml	=	0€
726.3ml	=	0.358€

#### Cost of mixing

1L	=	6€
100ml	=	0.6€

### Packaging cost

#### Inputs

1 glass bottle	=	0.5€
1 cardboard box	=	0.4€
1 instructions	=	0.2€
1 label	=	0.1€

#### Process

1 unit	=	0.2€
--------	---	------

### Cost of shipping

#### JNB to HAM

Average cost per liter	=	1.5€
Cost for 74g dried roots	=	0€

#### Factory to JNB / HAM to factory

Cost for 74g dried roots	=	0€
--------------------------	---	----

#### Factory to shop

Cost for 100ml bottle	=	0€
Total cost	=	0€

### Retail margin

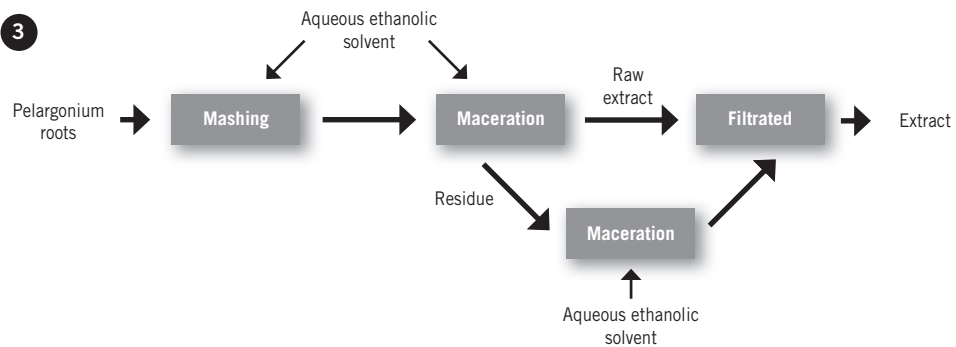
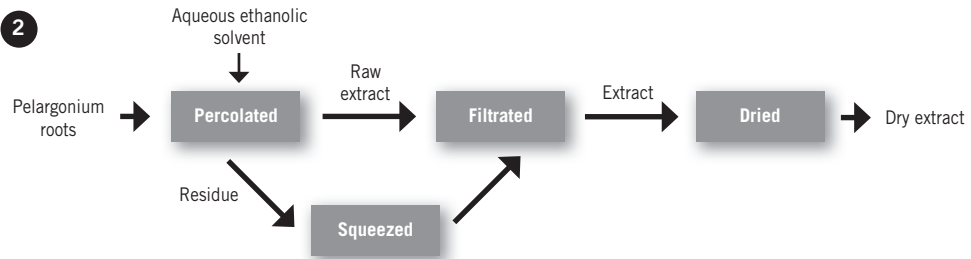
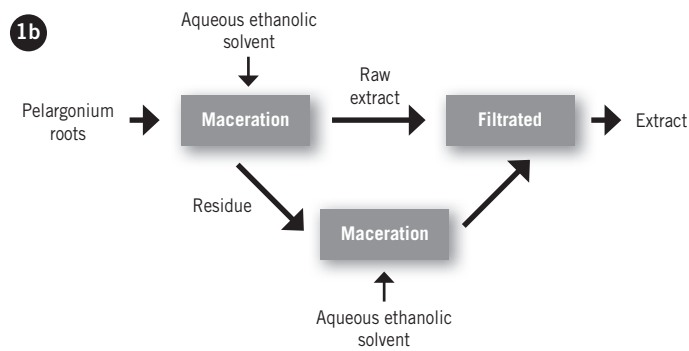
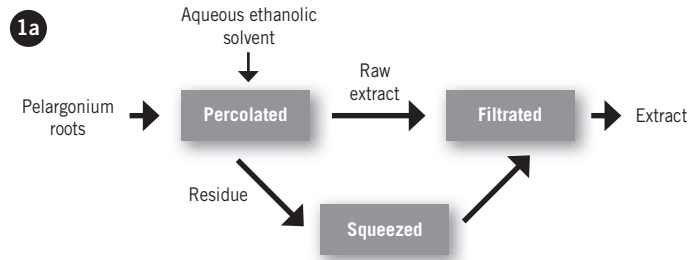
Final price ATI	=	30€
Retail margin	=	15€



## Datas

Research question	Data	Answer		Source
<b>Assessing raw material cost</b>				
% of pelargonium extract in Umckaloabo ?	10 g (= 9.75 ml) liquid contains: 8.0 g extract from Pelargonium sidoides roots (1:8-10).	80	%	www.umckaloabo-billig-online.de/
Quantity of pelargonium for 1 liter of extract ?	For 1 Kg of Umckaloabo you need 80-100 gram dried roots and 900/920 ml of extraction insolvent	92	g	Patienteninformation des Arzneimittel-Kompodium der Schweiz®; Umckaloabo® Lösung; Copyright 2008 by Documed AG, Basel
Price per kilo bought ?	Price local market range from R95/kilo to R150/ kilo	11.3	€	Afriplex / Health Synergetics / BZH / Parceval
	Price bought by Schwabe: not available (confidential business information)			
Cost of 1kg glycerol in the local market ?	Price in the french market	2	€	expert estimates
<b>Assessing manufacturing costs</b>				
Qty of ethanolic solvent needed		90	%	Industrial data (available upon request but not to be communicated)
Price of ethanol	Price in the french market	1	€/liter	expert estimates
Cost of percolating	Cost of processing 25kg of raw material	12	€/25KG	Industrial data (available upon request but not to be communicated)
Cost of mixing	Price in the french market	6	€/liter	Industrial data (available upon request but not to be communicated)
<b>Assessing packaging cost</b>				
Type of primary and secondary packaging	Glass bottle (primary)	0.5	€/unit	umckaloabo-billig-online.de ; expert estimates
	Carton box (secondary)	0.4	€/unit	
Presence of a notice	Yes	0.2	€/unit	expert estimates
Type of label	Glued label	0.1	€/unit	expert estimates
Cost of processing	Price in the french market	0.2	€/unit	expert estimates
<b>Assessing distribution and retail costs</b>				
Standard cost for shipping 1T of material	by boat : 1€/liter by plane : 2/3€/liter by truck : 0,2€/liter	1.5	€/liter	expert estimates
Standard retail margin	Standards retail margins	2 times	ATI price	expert estimates

**Schwabe claimed process**



**2** Claim number  
 Pelargonium roots Input or output

**4 5 6** Variations in the quantity of ethanol used but same processes  
**7 8**

**Filtrated** Step in the process

## Schwabe's Bioprospecting applications in South Africa

The ACB has been able to ascertain from the former Department of Environmental Affairs and Tourism (DEAT) that three permit applications were received for *P. sidoides* and *P. reniforme*.<sup>2</sup> According to DEAT, two of the applicants include Parceval Pharmaceuticals and Gowar Enterprises. The ACB attempted to gain access to these bioprospecting permits in terms of the Promotion of Access to Information Act (PAIA), but its request was refused by DEAT on the grounds that the permits may result in the disclosure of personal, commercial, confidential or research information.<sup>3</sup> DEAT was, however, willing to disclose to the ACB that BZH Import and Export has been listed as a collaborator with Parceval and Schwabe in the bioprospecting permit applications.<sup>4</sup> Investigations by the ACB have revealed that the permits applied for are in respect of access to the *Pelargonium* species, as well as its associated traditional knowledge. The bioprospecting activities involve two phases. These include the seeking of intellectual property rights (IPRs) over numerous uses and extraction methods of the plants and traditional knowledge and the wild harvesting, cultivation and export of the *Pelargonium* roots for extraction in the production of Umckaloabo in Germany.

The ACB has been able to ascertain that the permits are accompanied by a benefit sharing agreement concluded with a community in the Eastern Cape. This community is called the Imingclangathelo Community Trust. Indeed, since 2002/3 various cultivation projects were set up by Parceval and Gowar, involving *inter alia*, the Imingclangathelo Pelargonium Project (IPP), involving 160 ha of tribal land held by the chieftainship of Chief Tyali.

On the 11th June 2009, the ACB made substantive submissions to the Minister of Water and Environmental Affairs on behalf of the Alice community, objecting to the granting of the said bioprospecting permits and approval of the benefit sharing agreement/s. According to the Alice community, Parceval and Schwabe had failed to consult with the community as rights holders, as required by South Africa's bioprospecting laws and Constitution. The Alice community is registered as a community property association under the name, Masakhane Community Property Association (MCPA). The MCPA itself also sent a letter to the Minister on the 28th November 2009 wherein the community clearly states that it falls under the authority of Chief Tyali. It notes that the community is aware of various projects spearheaded by Parceval and Schwabe, some of which include, but are not limited to the Imicgangathelo Pelargonium Project, and that they have not been consulted about any of these. The MCPA specifically requested that the Minister not approve the applications for bioprospecting permits on the grounds that it had not been consulted in any negotiations with regard to benefit sharing agreements, material transfer agreements or the use of their knowledge and resources, as required by South African law.<sup>5</sup>

The Minister responded to these objections by noting the concerns raised and reassured the ACB and the community as follows: "you can be assured that I will not approve a benefit sharing agreement and consent to the issuing of a bioprospecting permit if I am not satisfied that the applicant has met with the required conditions, including consultation with the relevant stakeholders as required by NEMBA and the BABS regulations."<sup>6</sup>

## National and international protection of the species

The ACB has been steadily campaigning for the uniform national protection of the *Pelargonium* species for a number of years. It has made numerous representations to government officials of the nine provincial government departments as well as the relevant national government department, DEAT (now restructured as the DWEA). Correspondence and research studies to this effect fill up several lever arch files. The ACB also submitted substantive proposals on 28th August 2009 to DEAT for the amendment of the CITES (**Convention on International Trade in Endangered Species** of Wild Fauna and Flora) Appendix II List to include the *Pelargonium sidoides*. All of these attempts were fruitless as the government has decided that the species would be regulated internally, by means of a species management plan currently under development by the South African National Biodiversity Institute (SANBI) and an NGO, TRAFFIC. This would be done through utilization of the Threatened or Protected Species Regulations (TOPS) and Bioprospecting Access and Benefit Sharing Regulations (BABS). Review of this would be undertaken within 3 years to assess effectiveness. Such review would also consider the results of a national resource survey to be conducted by SANBI.<sup>7</sup>

At the time of writing, the TRAFFIC/SANBI Management Plan had not been available to the public. It is not known whether such a plan indeed exists and if so, when it will be finalised. The ACB has, however, been able to ascertain that such a plan would have to be submitted to SANBI for approval and be subject to internal government processes and approvals before it is released for public comment.<sup>8</sup> Interestingly, the ACB has also learnt that a so-called independent scientific report, funded by Schwabe, is being conducted under the auspices of SANBI concerning the *Pelargonium* species, and investigating population studies, recovery rates of the tuber after harvesting and so forth. At the time of writing, such a report was not available to the public. Indeed, the ACB was advised that such a study will take a while to complete because of the field studies requiring lengthy periods for such research.<sup>9</sup>

In the meantime, the illegal and unsustainable harvesting of the *Pelargonium* constitutes a severe and continuous threat to biological diversity in South Africa.

## Conclusion

The complex web of economic relationships and legal issues are difficult to comprehend, more so when one is a rural dweller in a remote location focused on eking out an existence from harvesting *Pelargonium* roots. Yet, the Alice/Masakhane community has understood enough to know that Schwabe has sought ownership for something that it is not entitled to. For the community, it is a matter of principal. Whatever happens with the patent challenge, the community would have made a brave attempt to right a gross injustice. The road ahead for the Alice/Masakhane community is a long and daunting one. It will be an arduous struggle to achieve some semblance of justice in the harsh climate in South Africa where Schwabe calls the shots. The benefit sharing paradigm in South Africa is one that favours trade in biological resources for the benefit of industry, and jobs for the poor – as mere labourers.

## References

1. Opposition to the European Patent EP 1 429 795 (European Patent Application 02 777 223.5) by Dr Willmar Schwabe GmbH & Co. KG, dated 18 December 2009. <http://www.epoline.org>
2. Letter from Ms Nosipho Ngcaba, Director General, DEAT to African Centre for Biosafety, 22 July 2009.
3. Letter from Director General, DEAT to African Centre for Biosafety, 20 May 2009.
4. Letter from Director General, DEAT to African Centre for Biosafety, 20 May 2009.
5. Letter from Masakhane Community Property Association to Minister Buyelwa Sonjica, 28 November 2009.
6. Letter from Minister of Water and Environmental Affairs Ms Buyelwa Sonjica, MP to African Centre for Biosafety, 8 December 2009.
7. Email correspondence from Sonja Meintjes, Deputy Director: Biodiversity Compliance, Dept of Environment Affairs to African Centre for Biosafety, 27 October 2009.
8. Personal Communication, John Donaldson, SANBI, 29 October 2009.
9. Personal Communication, John Donaldson, SANBI, 29 October 2009.



PO Box 29170, Melville 2109, South Africa  
[www.biosafetyafrica.net](http://www.biosafetyafrica.net)