

Indigenous herbal remedies supplementing MODERN HIV CARE

CSIR/SANBIO

Plant powder formulated through milling for use in the solvent extraction process.

A collaborative African research initiative has brought three traditional herbal remedies used to support HIV and AIDS care to the commercial market. Coordinated by the Southern Africa Network for Biosciences (SANBio) and hosted at the Council for Scientific and Industrial Research (CSIR), the project bridges Indigenous medical knowledge, modern scientific validation and regulatory oversight. The products, developed in partnership with traditional healers from Zimbabwe and Eswatini, are designed to complement antiretroviral therapy by helping manage symptoms and opportunistic infections. The initiative highlights how Africa can harness its biodiversity, research capacity and community knowledge to build ethical, sustainable and locally driven pharmaceutical innovation.

The three medicines – branded Mutombo, Mhenivir and Veravita – are based on the traditional knowledge of herbalists from Zimbabwe and Eswatini. They have been using plant-based remedies for over 10 years to assist with HIV and AIDS management alongside antiretroviral therapies.

“These medicines are a success story that demonstrates how Africa can develop and modernise its own medicines and healthcare solutions,” says Prof. Ereck Chakauya, the CSIR-based manager of SANBio.

“While most herbal medicines may not treat the disease itself, they help manage the symptoms and opportunistic infections,” says Chakauya.

“The reality on the ground is that communities often choose herbal products because they have minimal side effects, and research supports reduced resistance

by the virus compared to single-molecule medicines. This is especially important in the era of antimicrobial resistance.”

He explains that every medicine developed by the CSIR and its partners undergoes rigorous testing for safety, efficacy and quality, and must be approved by the relevant regulatory authorities in each country where it will be used.

For these HIV/AIDS remedies, the teams ensured that the medicinal plants would be harvested sustainably, with the prospect for further propagation, and that communities complied with the Nagoya Protocol on Access and Benefit-sharing.

“We signed agreements with communities to ensure the ethical use of their knowledge and that they are fairly compensated,” says Chakauya.



CSIR/SANBio

CSIR researchers involved in developing complementary medicines for HIV and AIDS management. From left: Dr Lindiwe Thete (senior researcher), Tina Chunga (senior process engineer), Makera Maloba (analytical chemist intern) and Dr Zandile Nxumalo (senior researcher).



CSIR/SANBio

Mutombo Immune Booster and Mhenivir are based on traditional herbal knowledge from Zimbabwe and Eswatini, where plant-based remedies have been used for over 10 years to support HIV and AIDS management alongside antiretroviral therapies. These remedies were developed as part of a project coordinated by SANBio, hosted at the CSIR.

The production process was established according to commercial good manufacturing practice and transferred to a private drug manufacturing company

capable of generating all the necessary regulatory data.

“In essence, we developed a viable business model for community-based herbal products, and these medicines are now in the process of regulatory approval by the competent authorities,” he says.

SANBio is a health and nutrition research platform of the African Union Development Agency (AUDA), under the AUDA-New Partnership for Africa’s Development (AUDA-NEPAD). The programme aims to eradicate poverty, promote sustainable growth and development, integrate Africa into the global economy and accelerate the empowerment of women.

“Our approach relies on science diplomacy through crossdisciplinary collaboration, mutual benefit and academic exchanges to leverage Africa’s wealth of indigenous medical knowledge and rich biodiversity,” says Chakauya.

He explains that the network’s experience with the HIV herbal remedies project – funded by the SADC Secretariat – has led it to advocate for an African health research agenda. This agenda should include a fit-for-purpose intellectual property regime to protect local medicines, as well as country-specific and comprehensive pharmacopoeia with inventories and guidelines on the medicinal properties of Africa’s rich flora and fauna.

“What this project also demonstrates is that there are adequate research and development institutions in Africa, there are private companies that we can partner with to manufacture quality products, and there are mature regulatory institutions – such as the African Medicines Agency – to ensure that medicines are accessible and safe,” he says.

Article written for and republished from CSIR Science Scope (Vol. 23, No 1; April 2025).

Boiteko bja nyakišišo bja tšhisinyo ya kopanelo ya Afrika bo tlišitše dihlare tše tharo tša setšo tšeo di dirišetšwago go thekga tlhokomelo ya HIV le Aids mmarakeng wa kgwebo. Boiteko bjo, bjo bo rulagantšwego ke Southern Africa Network for Biosciences (SANBio) gomme bwa amogelwa ke Council for Scientific and Industrial Research (CSIR), bo kopanya tsebo ya kahlolo ya kalafo ya setšo, netefatšo ya thutamahlale ya sebjalebja le taolo ya melao.

Ditšweletšwa tše, tšeo di hlamilwego ka tšhisinyo le dingaka tša setšo tša go tšwa Zimbabwe le Eswatini, di diretšwe go tlaleletsa kalafo ya di-antiretroviral ka go thuša go laola dika tša bolwetši le malwetši ao a hlaselago ge mmele o fokola. Boiteko bjo bo laetša ka fao Afrika e ka dirišago phedišano ya diphedi (biodiversity), bokgoni bja nyakišišo le tsebo ya setšhaba go aga boitlhamedi bja dihlare bja boitshwaro bjo bobotse, bjo bo swarelalago, le bjo bo hlohleletšwago ke selegae.

- Translated into Sepedi by Gemini 3