





AFRICA'S INDIGENOUS KNOWLEDGE TO PREVENTING AND CONTROLLING EMERGING INFECTIOUS DISEASES LIKE COVID-19 PANDEMIC: UTILIZING AFROCENTRIC RESPONSE

ASRIC STI STRATEGIC INTERVENTION FOR COVID -19

A Report Presented by Prof Kenneth Yongabi Anchang, Imo State University, Owerri, Nigeria Coordinator of the AU-ASRIC Afro-Centric working group for colloquium on December15th- 17th, 2020





PRESENTATION LAYOUT

- ✓ Presentation of the Research Team (AU-ASRIC Afro-centric Working Group on COVID-19
- ✓ An excerpt of the Terms of Reference (TOR) for the Working Group
- ✓ Reference to the Global and Continental Epidemiological picture of Covid-19 pandemic, Lassa fever, Ebola, and Yellow fever
- ✓ A highlight on the identified licensed antiviral, immune booster products for other viral infections repurposed for COVID-19
- ✓ Medicinal plant with antiviral and immune boosting agents identified in literature review with potential for Covid 19 management
- ✓ Addressing WASH and COVID-19 through African based technologies for water treatment
- **✓** SOPs for community driven pubic health for COVID 19 management in Africa
- ✓ Publications, media, new courses identified



OBJECTIVE

To Develop Guideline on Research Translation



MANDATE

Traditional medicine intervention to Covid-19 pandemic, this is thorough the following actions: Compile a compendium of plants through a systematic review of literature on published works on antiviral medicinal plants with view to selecting potent plants for large scale biopharmaceutical production (Short term goal);

Identify quinolines alkaloid analogues from local medicinal plants in Africa used in treating fever and flu indigenous to Africa, and test their efficacies against COVID 19, Ebola, yellow and Lassa fever (short term goal);

Identify already licensed African based herbal products for boosting the immune system and engage in clinical trials against COVID 19, Lassa fever and Ebola (by determining, establish and codify an Afro-standard for herbal extracts, products and derived supplements which meets or exceeds international standards) (Short term Goals)





MANDATE

OBJECTIVE

To Develop
Guideline on
Research
Translation

Posting community prevention measures Covid-19 pandemic, this is thorough the following actions: Identify selected antiseptic plants and locally source materials to produce disinfectants for hand sanitizers; standardization for manufacturers of hand sanitizers taking in to consideration production from locally available materials in Africa (from Africa's unique bio-cultural diversity) efficacy, safety, and availability (short term goals)

Produce standard operating procedures (SoPs) for the production, efficacy, safety and quality control for the use of hand sanitizers in Africa. Hand sanitizers production that have broad spectrum for DNA and RNA viruses (SOPs and usage and safety) (Long term Goals)

Propose a community strategic guideline **for** prevention of COVID 19 as well as Lassa and Ebola in rural and semi urban Africa (Short term goals)

Work out the production of simple face masks with the precise filter size with appropriate filter size for filtration of COVID 19 (Long term goals)

Screen the selected antiviral plants visa –a- vis- standard controls against COVID 19 using proxy models and run randomized control clinical trials on extracts and products found to be effective in vitro (Long Term Goals)

Develop unique afro centric policy brief and policy guideline for the integration model for integrated hospitals in Africa that combine Orthodox and Complementary medicine (Long term goals)





AFRO-CENTRIC WORKING GROUP MEMBERS



Prof.KennethAnchangYongabi Coordinator, Nigeria



Dr.Amira Adel Taha Abdel Aleem AL-Hosary, Egypt



Mr EnockMac'Ouma, Kenya



Dr Joseph Nicalao Otieno Tanzania



Prof PercyChimwamurombe Namibia



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Mr Gideon Adotey, Ghana.



AFRO-CENTRIC WORKING GROUP MEMBERS





Phytobiotechnology Research Foundation (PRF) Africa (Central Africa) is a Non Governmental organization registered with the Cameroon in Central Africa Government (CIG Reg. No:NW/GP/29/07/10856). Phytobiotechnology Research Foundation is a NON-Governmental research based organization, registered with the Cameroon government CIG Reg. NW/GP/27/07/10859 and 0068/E.29/1111/Vol.8/APPB and registered with the European UNION: Euroaid No: 958820266. It was registered in May 2007; registration is in accord with the Cameroon Government Provision of law No. 92/006 of August 14 and its decree of implementation No. 92/455/pm of November 23rd, 1992.



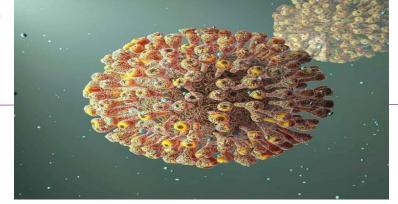
Mr Nkwenti Collins, PRF Team African Diaspora

Mr Fru Ernesto, PRF Team (Diaspora, USA)



Global COVID-19





- Since the beginning of the pandemic in 29 December 2019 Chinese authorities identified a cluster of similar cases of <u>pneumonia</u> in the city of Wuhan.
- On 11th March 2020, WHO declares the COVID-19 Pandemic as of the disease spread to the world reaching more than 118,000 cases and 4,291 lives lost.
- Since then the disease gradually spread to the world reaching lost of lives. Refer to Africa CDC on continental updates on COVID 19 and other infectious diseases (https://africacdc.org/)
- Refer to John Hopkins (https://coronavirus.jhu.edu/map.html) for Global updates on COVID-19
- Refer to WHO (https://www.who.int/emergencies/diseases/novel-coronavirus-2019?adgroupsurvey)





OUTPUT 1

Traditional Medicines Claimed for COVID-19 symptoms and identified medicinal

COVIC Organics from Madagascar (not extensively Validated)

Kleda s formula from Cameroon (not extensively validated)

Pax herbals from Nigeria (Fast tracked listing by NAFDAC based on toxicology only)

Ruzu herbals from Nigeria (Listed by NAFDAC not for COVID -19 nor Viral Infections)

Many others from east, central, south, west and North Africa (level of local claims)

We noted: Safety, Efficacy and Quality (SEQ) profiling is lacking

We noted plants with alkaloids similar to Quinine similar to Cinchona: Aloe barbadensis, Vernonia species *Disthemanthus bentamianus*, Artemisia annua, A abstenii, Curcumis longa Azidiracthcha, indica, Vernonia amygdalina, Moringa oleifera, Minth (Mentha). Allium sativium, Clove (Syzygium aromaticum), Garcinia kola Others identified plants: Pleurotus ostreatus, Ganoderma lucidum, Zingiber officinalis, cloves, coffea robusta, Theobroma cacao, occimum gratissimum, (attention was paid to anecdotal uses and traditional knowledge of uses and widespread across Africa



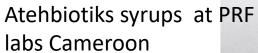
A S R African Scientific Research and Innovation Council

Moringa PCM Tablets at PRF labs Cameroon

Potentiatiating existing drugs with phytomaterial: Case of Garcinone and Moriginine and Gingerone (Azithromycine,

















4. SOLANIUM NIGRUM(100MG) BLACK NIGHTSHADE, CENTRAL SOUTH AND WEST AFRICA, ASIA, AMERICA, SOLANACEAE



BMEDICINALLY USED IN THE MANAGEMENT OF SEVERAL AILMENTS, SUCH AS PNEUMONIA ACHING TEETH, STOMACHE ACHE, TONSILITIS, WING WORMS, PAIN INFLAMMATION, FEVER, TUMOR, AS TONIC, AS ANTIOXIDANT, AS ANTI-INFLAMMATORY, AS HEPAPROTECTIVE, AS DIURETIC, AND AS ANTIPYRETIC

ZN MICROELEMENT, POLYPHENOLS, FLAVONES, ANTIOXIDANTS, REDUCES OXIDATIVE STRESS, COGNITIVE AND NEUROCHEMICAL DAMAGE

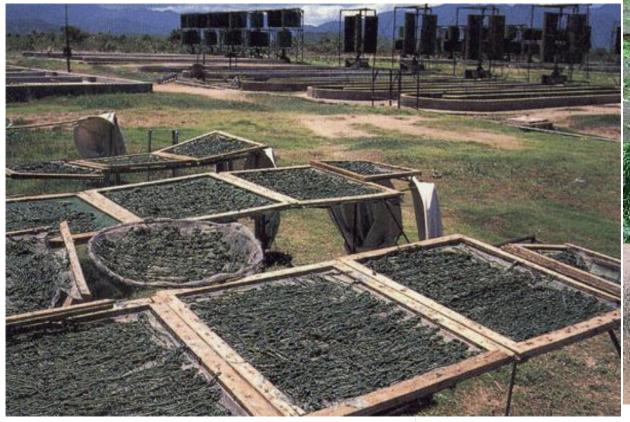
NEUTRACEUTICALS FUNCTIONAL FOOD TO PREVENT ALZEIHMERANTIPYRETIC, DIURETIC, ANTICANCER, AND HEPATOPROTECTIVE EFFECTSTHE POLYPHENOLS AND ANTHOCYANIDIN IN VARIOUS PARTS OF THE SN PLANT WERE ANALYZED BY HPLUTEOLIN, APIGENIN, KAEMPFEROL, AND *M*-COUMARIC ACIDLC



Spirulina platensis for immune boosting, PRF initiative (Proposed)



• Present in lake chad, north of Cameroon.spirulina grows on waste water and water can be treated with Moringa coagulant, phytonutrients for medicinal value (Pics not from PRF)

















4 times the Vitamin A of Carrots



 $3 \, \mathrm{times}$ the Potassium of Bananas

2 times the Protein of Yogurt



Tiny leaves.
Enormous Benefits.









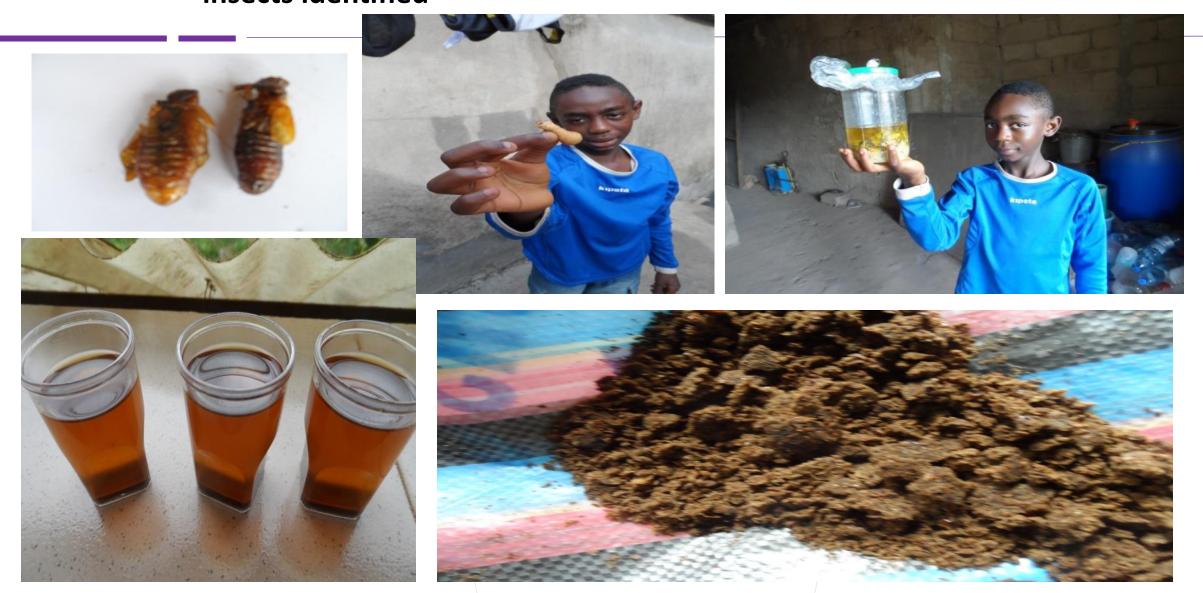








Other sources of Traditional Medicine and healing foods: Edible insects identified











OUTPUT 2



Licensed African based herbal products for boosting the immune system and engage in clinical trials against COVID 19, Lassa fever and Ebola FOR AU MEMBER STATES

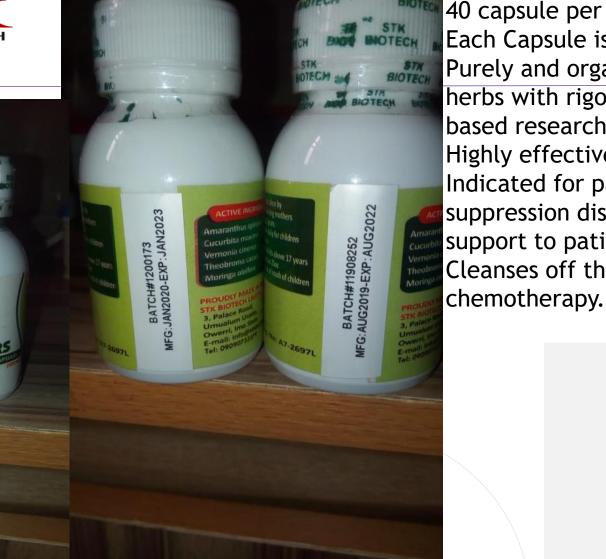
Safety profiles (toxicity, acute and subacute, phytonutrients, bioactive fractions) using in vitro and ex vivo mammalian models by the researcher and the regulatory institution

Efficacy profiling (antioxidant, immune stimulatory activity, antiviral, antimicrobial, antiinflammatory, antipyretic,) in vitro and ex vivo models, exit poll clinical trials, clinical trials, long time community use (anecdotal)

Quality (preparation and production, microbial quality, heavy metals, pesticides, type of water used, extraction and solvent residues, GMP, HACCP, GCP, PH, RF, TLC, OD, spectrophotometric analyses, sieving and particle size, production pavilion, packaging, shelf life, Availability, production chain, cost and conservation (Essential medicinal plant list)







STK Boosters

40 capsule per container

Each Capsule is 500 mg

Purely and organically extracted from

herbs with rigorous studies on evidence

based research.

Highly effective with minimal side effects Indicated for patients with Immune suppression diseases such as cancer. A cosupport to patients on chemotherapy. Cleanses off the side effects of

STK Booster

NAFDAC REG NO. A7-2670L





Phytoimmune 1 4 1 For Compromised Immune Systems

STK Phytoimmune 40 capsule per container Each Capsule is 500 mg



Purely and organically extracted from herbs with rigorous studies on evidence based research Highly effective with minimal side effects Indicated for patients with immune deficiency diseases, also indicated for Opportunistic cancers and malignancies such as Kaposi Sarcoma due immune deficiency syndrome. Cleanses the liver and kidney of synthetic drug residues.



NAFDAC REG NO. A7-2698L



NAFDAC Licence



INDEX NO:

LISTING NO:

A7-2698L



00000525

PRODUCT PIN NO.

APPLICANT TIN NO.

NATIONAL AGENCY FOR FOOD AND DRUG ADMINISTRATION AND CONTROL (NAFDAC)

Certificate of Listing

is hereby granted in respect of STK PHYTOMUNE HERBAL SUPPLEMENT CAPSULES

Product STK BIOTECH LIMITED,

CHIEF STANLEY UKAGA'S COMPOUND, UMUALUM URATTA, OWERRI NORTH L.G.A.

IMO STATE

Name & Address of Company/Applicant

CHIEF STANLEY UKAGA'S COMPOUND, UMUALUM URATTA, OWERRI NORTH L.G.A.

IMO STATE

Name & Address of Manufacturer

Additional Manufacturing Sites

This certificate expires on_

19TH DECEMBER, 2020

Dated this 20TH Day of_

DECEMBER, 2018



(NAFDAC)



INDEX NO:

LISTING NO:

A7-2697L



CERT. NO: 00000526

PRODUCT PIN NO.

APPLICANT TIN NO.

NATIONAL AGENCY FOR FOOD AND DRUG ADMINISTRATION AND CONTROL (NAFDAC)

Certificate of Listing

is hereby granted in respect of STK BOOSTERS HERBAL SUPPLEMENT CAPSULES

CHIEF STANLEY UKAGA'S COMPOUND, UMUALUM URATTA, OWERRI NORTH L.G.A

Name & Address of Company/Applicant

CHIEF STANLEY UKAGA'S COMPOUND, UMUALUM URATTA, OWERRI NORTH L.G.A IMO STATE

Name & Address of Manufacturer

Additional Manufacturing Sites

This certificate expires on. Dated this 20TH

Day of_

19TH DECEMBER, 2020

DECEMBER, 2018



(NAFDAC)





Research and

Low levels of Serum albumins corresponds with declining levels of antibodies and concomitantly Low viral loads

Patient was tested positive for HIV 1 antibodies, followed Kaybiotics therapy, 9months later he was not found with the antibodies see the band on the kit at the start *top* and at the end*bottom*



Total No. Of Patients HIV/AIDS 930 (100%)Total No of females with HIV/AIDS 530 (56.98%) 400 (43.0%)

Mean serum albumin value = 3.2 g/dl (NR = 3.4 to 5.4 g/dl) increase to 4.5 g/dl, mean body weight =50kg increase to 60kg, mean CD4 cells of 198 cells/mm3 increase to 419 cells/mm3 in 3 months amongst HIV/AIDS patients, high enough to protect patients from AIDS defining diseases.



Dr. Kenneth Yongahi Anchang is a medical science expert and an Associate Professor with a PhD and D.Sc in Public Health Infectiology and a PhD in Bio(medical) Engineering. Kenneth is also a practicing Naturopath Doctor and member of the American Naturopathic Medical Association. His medical practice has been highly focused on a holistic integrative medicine with particular attention to African indigenous medical approaches. To this effect, he is a member of the Cameroon National Council for traditional doctors and coordinates research in traditional medicine for cancer treatment. He lectures on naturopathic medicine, public health engineering, and clinical microbiology in many local and international institutions, and he is a faculty member at the School of Health and Medical Sciences at the Catholic University of Cameroon in Bamenda where he doubles as Director of Research. He received his undergraduate and Post graduate studies at Abubakar Tafawa Balewa University in Nigeria where he also lectured for five years and coordinated esearch at the University's multidisciplinary ZERI Research Centre. He has a strong backs and natural products, and he runs a clinic in integrative medicine. He founded the Phytobiotech nology Research Foundation and Clinics in 2007. He was the first to use the word Phytobiotechnology as well as associated terms like Phytodisinfectants and phytocoagulants. He was a member of the Infectious Disease Society of America (IDSA in 2007-2009). His expertise spans across clinica ngineering, chemical engineering, and African indigenous knowledge and ethnomedicine. During esistance study in the tropics as well as prospecting new antimicrobial substances from medicinal nigher and lower plants and microbes from extreme environments against HIV/AIDs, cancer nepatitis, and typhoid infections in Cameroon. He is also the principal leader on some of the projects that members of his foundation are undertaking, which include mushroom cultivation integrated fish farming, and small scale biogas digesters to harness cooking fuel from agrowastes. Some of these projects at the foundation have generated small scale social enterprises among a number of women's groups. He supervises a number of masters and PhD research works on crypto-sporidiosis, public health water purification, and fungal infections and its prevalence among HV/AIDS patients in sub-Saharan Africa. Kenneth has more than seventy-five peer-revieweurnal articles in both local and international journals, two books published in Germany and the nited States of America, four scholarly book chapters, more than thirty conference articles, technical papers, and monographs, an invited chapter in the UNESCO Encyclopedia of Life Support Systems, and many invited international lectures. Professor Yongabi also consults for a number of research institutions and serves as an external examiner for some African universities asultant to many non-governmental organizations across Africa and oversea



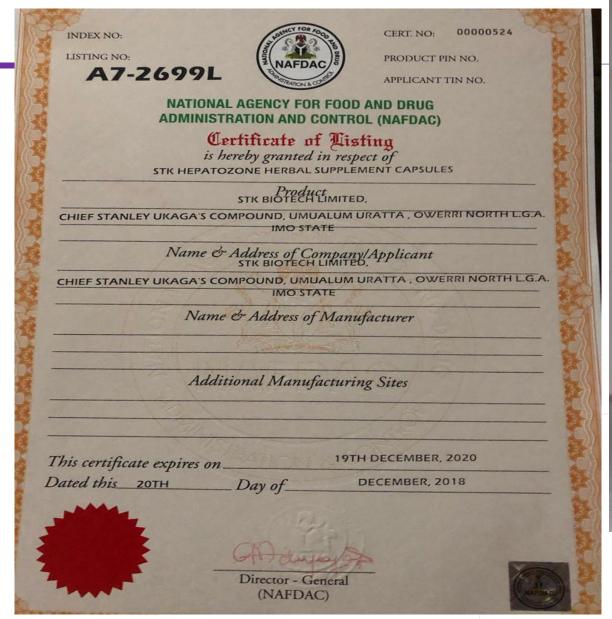




Biotechnology in Agriculture, Industry and Medicine









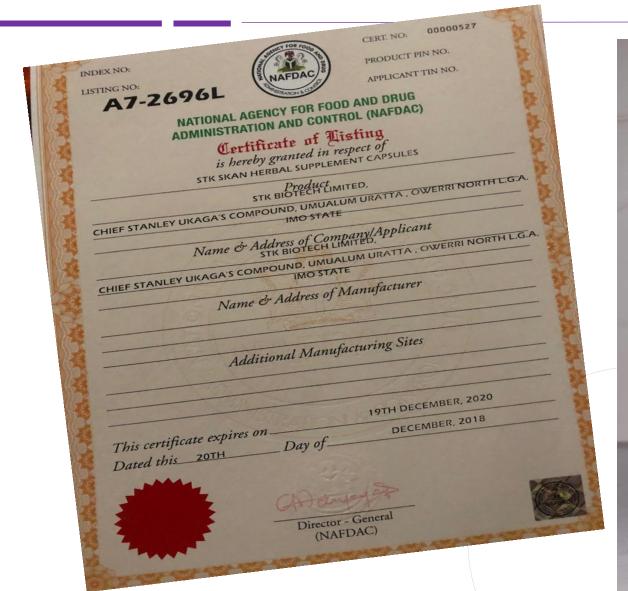
STK Hepatozone; A7-2699L

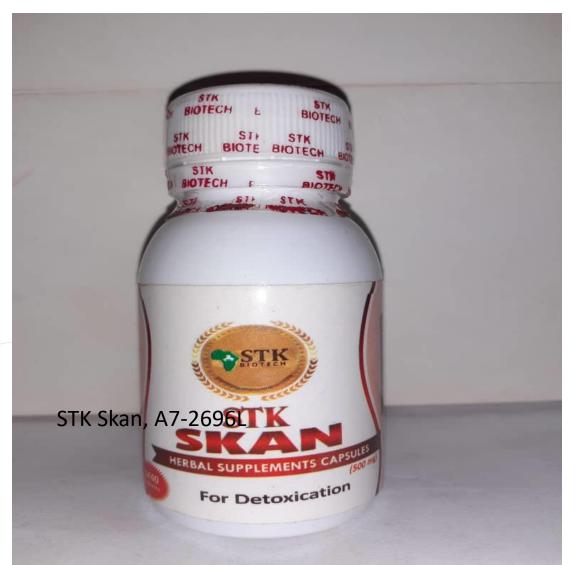
For viral Hepatitis B,C, D, A, E





Licensed for management of HPV related cancers and other cancers. Identified as underlying co-morbidity for COVID









Key compounds and proposed mechanisms (See materials provided) STK Boosters and Phytoimmune Marchantins (novel marchantinone, Yongabi et al 2016.. Stimulates immune response (alpha interleukins and cytokines) provides immuneprotection (Marchantia debilis), stimulates production of Zinc which potentially blocks the COVID 19 replication

- Beta gucans immune stimulatory substance (Pleurotus ostreatus and termitomyces titanicus), also with essential amino acids, immune stimulatory
- Paradol from one of the extracts stops thromboxane synthetase (ant platelet agent)prevents thrombosis thus plays the function of acetyl salicylic acid (Aspirin) also antiinflamatory (enhances oxygen flow) prevents hypoxia in COVID 19 disease condition
- Allicine and gingerone and ellagitamins from Allium sativum antiviral and antipyretic reduces temperature and fever in COVID 19 disease condition.
- **Zinc , Magnessium and Iron, Selenium , Vit A, vit c from** Moringa oleifera, Solanium nigrum, Theobroma cacao, Amaranthus play the role of antioxidants, nutriceuticals and boost the immune system, fights anaemia (increase Hb and WBC as demonstrated during the ex vivo studies in mice and with patients taking the spplements for HIV
- **Epigallactins, catechins** from camellia sinensis and alkaloid Moriginine and peptide (less than 12Kdalton) antioxidant, reduces oxidative stress in COVID 19 patients, increases appetite.
- The components in the selected herbs and mushrooms have been identified with ample micronutrients, macronutrients, minerals, with well selected cereals and grains used as fillers and adjuvants. The mix of antioxidants, antiinflammatory, immune boosting, antiviral properties and the unique processing and extraction techniques, safety and efficacy makes these products viable option for large scale medical use in Africa/
- STK phytoimmune and STK boosters have demonstrated treating underlying co morbidities and risk s for COVID 19 such as conditions with Hepatitis, Cancer, diabetes, and other immune suppressive conditions such as HIV/AIDS





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1. Amaranthus roots as diuretic and antijaundice Seven compounds, including two diglycoside flavonoids hesperidin (1) and rutin (2), one phenolic acid (E)-ferulic acid (3), two amino acids namely tyrosine (4) and arginine (5) and two sterols comprising spinasterol (6) and spinasterol 3-O- β -D-glucopyranoside (7) were isolated from the whole plant of **Amaranthus**

2. Moringa Oeifera

Moriginine alkaloid, peptides less than 12Kdalton

3. Theobroma cacao.

Although mainly cultivated for food **use**, **cacao** also has **medicinal uses**. It is used to stimulate the nervous system, lower blood pressure, dilates the coronary arteries, and soothes and softens damaged skin. It is also used against anemia, angina, bruises, chapped skin and burns, diarrhea, and leprosy spots.





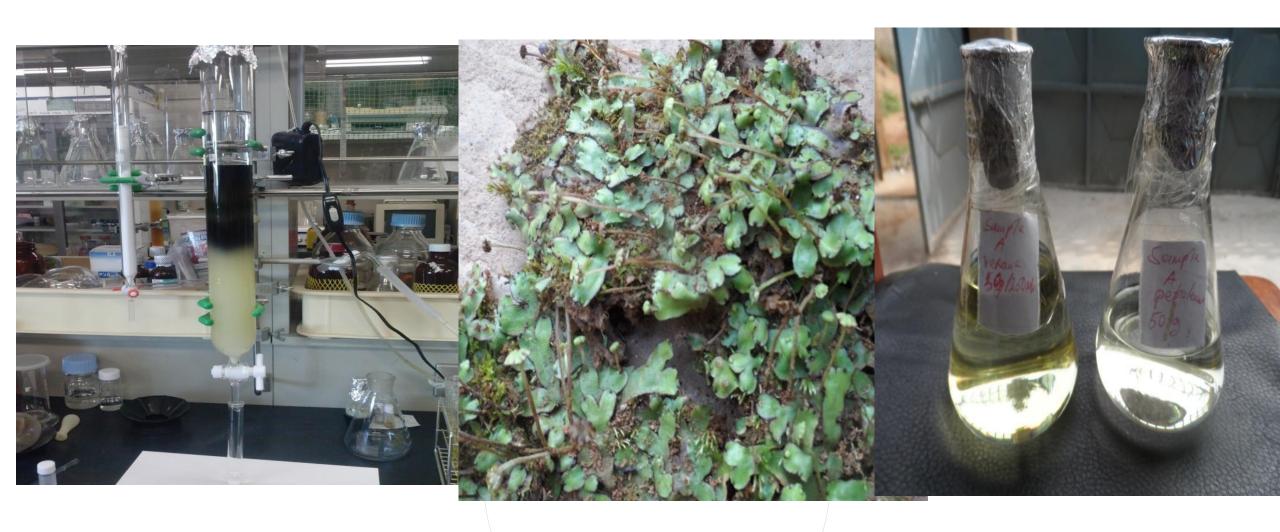
Selected and Screened medicinal plants

- STK PHYTOMUNE (500MG)
- Solanium nigrum (100mg) whole
- Zea mays (75mg) (Red variety seed)
- Pleurotus ostreatus (125mg) whole
- Camellia sinensis (50mg) leaves
- Marchantia debilis (150mg) whole
- STK BOOSTERS (500MG)
- Amaranthus spinosa (125mg) whole
- Vernonia cinerea (100mg) whole
- Cucurbita Maxima (125mg) whole
- Theobroma cacao (75mg) seed
- Moringa oleifera (75mg) leaves





• To carry out a chemical analysis of the African Liverwort-Marchantia debilis Goebel from Cameroon using GC-MS and GC-MS.

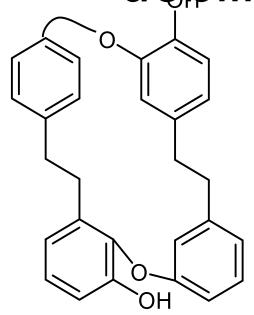


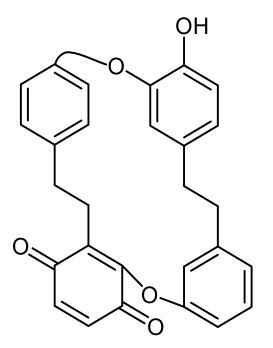


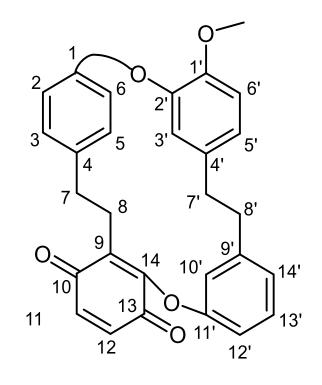


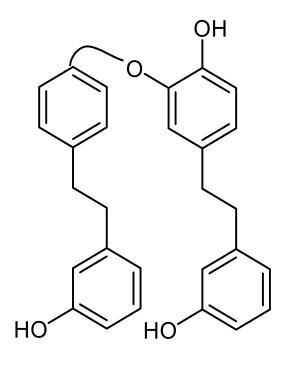
Bis-bibenzyls isolated from Marchantia

debilis









1 Marchantin C

2 Marchantin Q

3 Marchantinquinone-1'-methyl ether

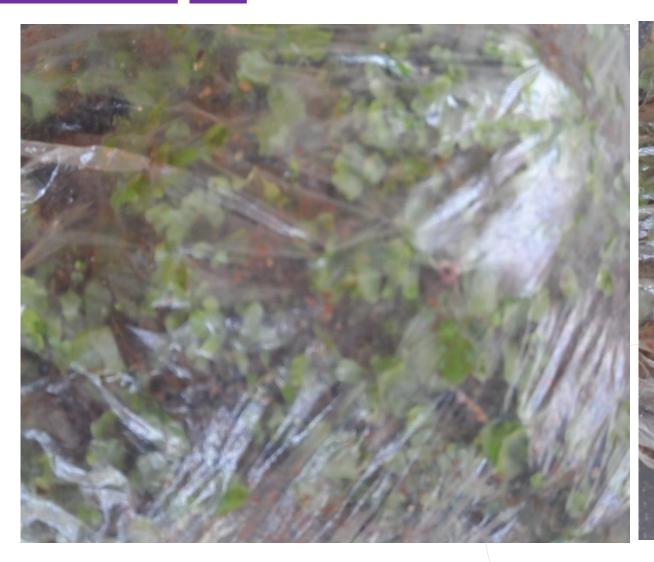
4 Perrottetin E

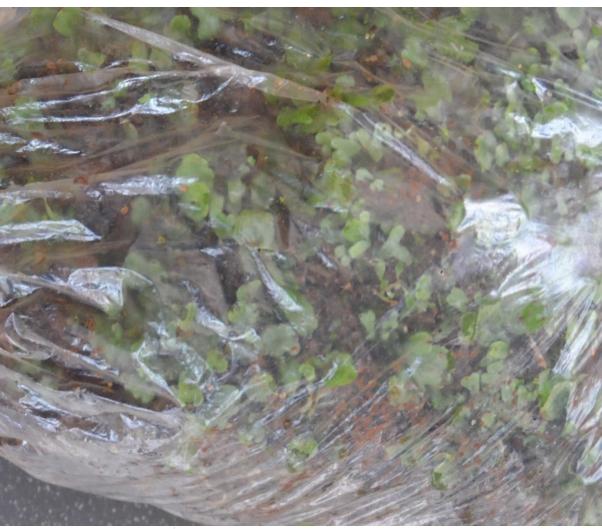
Yongabi et al. 2016, NPC, Vol. 11, No. 9, PP 1317-1318





Domestication of Bryophyte marchantia using 10% sugar solution and observed growth for 6 months









1.Several Consultation with experts and researchers on the contribution of traditional medicine and COVID-19 in the African Region/Consultation sur la medicine traditionnelle2 may 10 close to 190 participants

Afro-centric Health Literacy Intervention Strategies - World ...

origin.who.int > working-groups > 13-s4-yongabi

PDF

2.Many herbal claims across Africa, Madagascar, Cameroon, Senegal, Nigeria, etc (our Working Group)?? The problem... my views on the approach in the link:

COVID-19: The Best Solution Remains Evolutionary Learning ...

headlines.ng > COVID-19

Apr 17, 2020 - Kenneth Anchang Yongabi is a Professor of Public Health, Infectiology and Phytobiotechnology at the Imo State University, Owerri. He is a .

3.An African response strategy required .. AU most Credible to lead Africa (best options for now versus Vaccines??)

'Africa must combine modern, traditional medicine to combat ...

thenationonlineng.net > africa-must-combine-modern-t

Clinical trial: Randomized control placebo studies, design available. 25 -50 patients (COVID 19) or with symptoms across the regions of Africa (Central, South, North, East, West) required.



Validated Production Facility STK Biotech Ancillary Equipment



Packaging Room

Inkjet Labeling Machine

Laser Labeling Machine

Heat Gun

Farm House

Industrial Crushing Machine

Consulting Rooms

Examination Bed

Blood Pressure Monitor (2Nos)

Blood Sugar Tester

Generator House

110 KVA Perkins Diesel Generator

30KVA Perkins Diesel Generator

5KVA and 8KVA Firman Petrol Generators





Production line:GMP, GCL, GMP, HACCP

Visit by Pharmaceutical Society of Nigeria (PSN) The president, Pharmaceutical Society of Nigeria PSN, *Professor* Sam ... PSNPfizer Pharmaceuticals WestSTK HepatozoneNovartis*Kenneth Anchang Yongabi*. https://www.newsbreak.com > news > imopharmacists-...

Visit by National Institute for Pharmaceutical Research (NIPRD) Abuja

FG Pledges to Lift STK Herbal Medicine, as NIPRD DG Tours ...

https://www.thisdaylive.com > index.php > 2019/12/28



Approved dosage by NAFDAC

One tablet (500mg) twice a day five days a week for 4 weeks (40 capsules per container) taken orally with water after meals. Patients advised to take a lot of fluids.

Complements other therapies but taken at least thirty minutes before or after any other synthetic drug. Dosing also depends on the level of the disease and underlying clinical problems and must be supervised by a Physician.

For children and pregnant women, consult your





discount for presents airs from one suppression discount such ascances. A ce-support so patients or demonstratory. Cleanses of the side affects

STR HERATOZONE
Indicated for parients with both siral and non-vinel
indicated for parients with both siral and non-vinel
indicated happetitis. Ever contact Perpeturizations in
four the stabilities for our exception makes such
as SCOT, SCOT, Severa condition, and inverses the
side effects of potterns roking chemical property for the

STK PHYTOMUNE
Indicated for parents with immune deflicency
discount, also indicated by Opportunistic contest
and malignancies such as Kaposi Screams due
immune deficiency syndrome. Cleanses the liver

STR SKAN
Indicated for patients with systemic concers such
es Leukemia. Prostate and Cervical cancers et
aiffurent disses. Very good as -support Hemopy for
patients on chemotherapy as it reutralizes the side

STK Loose-IT indicated for policins with abosity, increase inatabaltism while suppressing appetite.

Shif REV
An immune booster-specifically indicated for partiers with diabetes and diabetes sum drug indicate lot-libido. Very good on support therapy

APPROVED

Email: info@stkbiotech.com; stankaga@gmail.com

Visited by the Association of Medical Laboratory Scientists, Nigeria





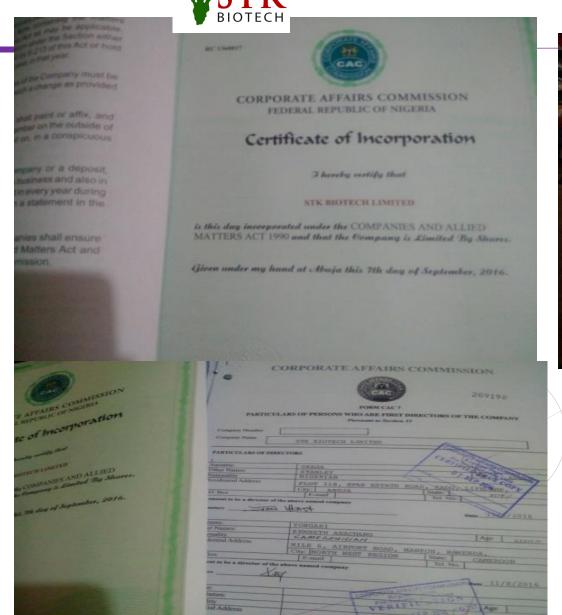
Quality assurance

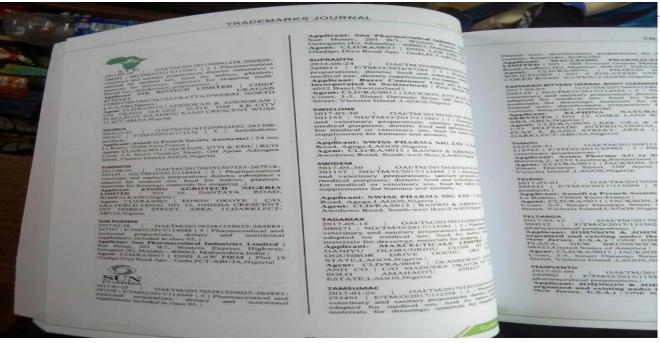
- Microbial analysis of raw materials and finished products (Fungal and bacterial counts, identification) We use batch Nos.
- We track specifically mycotoxin producing fungi
- (UV sterile rooms and solvents (Iodine in acetone to disinfect aerosols)
- We take PH and absorbance of our products STK boosters,
 Phytoimmune, (520nm, 450 nm) we make suspensions with sterile distilled water (calibration of standards)
- Attention (GMP, HACCP): Lot number, Batch number and filing system for each product (Orphan production)





Example 1 Phytobiotechnology Trade mark





Duly registered as a company in Nigeria and trade mark registered in Nigeria.

Products undergone regulation and approval by Food and Drug, NAFDAC Nigeria



Preventive dose for COVID 19



- One capsule (500mg) orally with food and water a day daily 3 days a week especially in a high risk burden area (STK boosters) for 4 weeks
- Full treatment with early window phase infection> One capsule (500mg) of Boosters
 morning and one capsule Phytoimmune in the evening 5 days a week for 14 days.
- Complementary treatment for COVID19: with STK Boosters and Allopathic therapy:
- 1. Coartem (Arthemether/Lumefantrine) or Coartem forte one capsule gel twice a day for three days continue for another three days
- 2. Azitromycine 500 mg twice a day for 7 days
- 3. Panadol 500mg a tablet twice a day for 5 days
- 4 STK boosters 500mg one capsule (morning) daily 5/7 days for 14 days
- 5 STK Phytoimmune (500mg) I capsule (evening) daily 5/7 days for 14 days
- The physician is consulted for an evidence based clinical work up management



Addressing Water and Sanitation within COVID 19



OUTPUT 3

Pandemic treatment with Moringa sand filter rigs.





Plant Coagulants/Disinfectants

A 5 R

African Scientific Research and Innovation Council

• Cactus, Quar gum, Syncchronus potatorum, Hisbiscus

• Moringa Oleifera



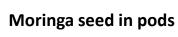






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The first of the control of the cont





Alternative Perspectives in Water and Wastewater Treatment

Phytocaleplant seed filter and Hartic digerters for Water and Vasitivestra Department



Yougaki Growth





Strategies to Avoid Catching the Covid-19 Virus



1) Hand Washing

2) Hand Sanitizers https://www.vanguardngr.com/2020/05/weve-received-only-one-application-on-claims-of-herbal-covid-19-remedies-nafdac

The need to build Sanitation health literacy in the era of COVID in Africa is recommended

3) Face Masks

4) Social Distancing





Moringa sand filter drums, low cost water wastewater treatment in Cameroon. Ecological hygiene: lessons from nature and Ecological medicine









Our sample well for water supply for a rural household with a simple Pulling system tied to a bucket. (Kenneth in the Photo)

Water Supply

We work on simple water supplies by drilling simple low cost wells for rural households. Where there is no water supply at all or limited water supply.





OUTPUT 4:

Protecting Farmers from disease transmission: Building SOPs for hand sanitization, and use of face mask and gloves for African farmers during and after COVID-19 pandemic





We have started to build an Ecological Hygiene





OUTPUT 5:

1. Formulation, Evaluation, and Antimicrobial studies of water-based herbal hand sanitizer gel against Infectious diseases such as SARS CoV-2 (WIP)

3. Low cost plant based soaps with local materials identified (WIP)

4. 1st VIRTUAL TRAINING WORKSHOP ON: Addressing COVID-19 in AFRICA through WASH: Household water filtration and Installations using low cost materials in AFRICA on the 8th and 9th of December 2020, with more than 60 participants by AU ASRIC 2. Plant based herbal hand sanitizer against Infectious agents and SARS CoV-2 (100%) Ecological identified (WIP)





Plants For Continuous research work



- Face mask: plants for face mask production and validation of efficacy
- Phytodisinfectants: plants based on afrocentric knowledge
- Sanitizers; Soap local soap
- Selected plants for further screening based on symptoms of COVID and other viruses:
 Coffee, Cocoa, Pumpkin, Mushrooms, Occimum,
- Artemsia annua, garlic, Ginger, tumeric,
- Disthemonanthus sp
- Afro centric Health Literacy framework for Diaspora engagement and community approach for control of Infections such as COVID

AfroSuppressCOVID19: 6 point strategy based on african communty realities to control COVID MPH Laboratory (Tanzania, Namibia, Ghana, Egypt, Kenya, Cameroun)



OUTPUT 6: Media, Conferences and Information dissemination



Preconference WCPH2020



Theme: Helping people to help themselves to better health -From theory to practice.



This presentation was prepared by Prof Kenneth Yongabi, Faculty of Health Sciences, Imo State University, Owerri, October 12, 2020 yongabika@yahoo.com

'ADVOCATING FOR A COMMUNITY PARTICIPATORY APPROACH FOR THE PREVENTION OF COVID-19 IN AFRICA'

CONSULTATION WITH EXPERTS AND RESEACHERS ON THE CONTRIBUTION OF TRADITIONAL MEDICINE TO COVID-19 IN THE AFRICAN REGION – World Health Organisation – AFRO

Date: 8th May 2020

Time: see below your own

time zone

Awarded the Marc Bopelet Gold Medal for Excellent contributions in African Public Health Systems by the Cameroon Academy of Sciences, 2020







1.Several Consultation with experts and researchers on the contribution of traditional medicine and COVID-19 in the African Region/Consultation sur la medicine traditionnelle2 may 10 close to 190 participants

<u>Afro-centric Health Literacy Intervention Strategies - World ...</u>
<u>origin.who.int > working-groups > 13-s4-yongabi</u>

PDF

2.Many herbal claims across Africa, Madagascar, Cameroon, Senegal, Nigeria, etc (our Working Group)?? The problem... my views on the approach in the link:

COVID-19: The Best Solution Remains Evolutionary Learning ...

headlines.ng > COVID-19

Apr 17, 2020 - Kenneth Anchang Yongabi is a Professor of Public Health, Infectiology and Phytobiotechnology at the Imo State University, Owerri. He is a .

3.An African response strategy required .. AU most Credible to lead Africa (best options for now versus Vaccines??)

'Africa must combine modern, traditional medicine to combat ...

thenationonlineng.net > africa-must-combine-modern-t

Clinical trial: Randomized control placebo studies, design available. 25 -50 patients (COVID 19) or with symptoms across the regions of Africa (Central, South, North, East, West) required.





https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)32642-

Lancet

community

has been greeted with enthusiasm. ir acces to COMID-19 vaccines sed.1,2 There are concerns about 020, suggest direct purchase



DEBATE CMR PERSPECTIVES



Presents

ROUNDTABLE DISCUSSION

CLINICAL TRIALS AND VACCINES CONUNDRUM: SHOULD COVID-19 TRIALS BE DONE IN AFRICA?







Guests:

Dr Shey Eugene Ateh, DVM Nicol Lami, NP, MSc Prof Kenneth Y Anchang, PhD, D.Sc, ND

SATURDAY APRIL 18, 2020 ON THE **BIG DEBATE FACEBOOK PAGE - FACEBOOK LIVE**

TIME: 13:30 CT, 14:30 ET, 19:30 UK, 19:30 BUEA, 20:30 CET



INSTITUTE FOR **BIO-PHYTOMEDICINE** & PHYSIATRY







Guideline for Improved Harmonized Good Clinical Research Practice for AU Member States

CONCLUSION

The Task is enormous: From Out puts 1-6, a lot has been achieved but the tasks remain uncompleted. The need to complete the tasks. A huge potential for carrying clinical trials of afrocentric talented medicinal plant derived products should be supported, more evidence based lab studies on antiviral and immune boosting plants should be forged ahead.

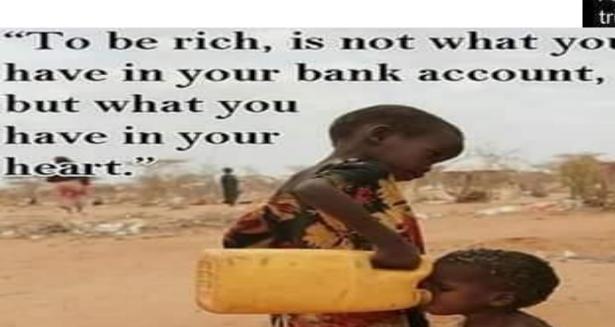




Conclusion : Community led interventions for COVID 19 in Africa would hardly fail:

The Ubuntu concept in health Care: I am because you are. My unwellness makes the community unwell.

COVID 19 control measures cannot be a one size fit all for all the continents of the world





An anthropologist proposed a game to the kids in an African tribe. He put a basket full of fruit near a tree and told them "To be rich, is not what you! whoever got there first won the sweet fruits. When he ve them the signal to run they all took each other's hands ran together, then sat in a circle enjoying their treats. ien he asked them why they chose to run as a group en they could have had more fruit individually, one child oke up and said: "UBUNTU, how can one of us be happy Il the other ones are sad?"

BUNTU' in the Xhosa culture means: "I am because we





Thank You





OBRIGADO

