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each DROP
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Knowledge,
we
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ocean.

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Editor's Letter

Howdy!

Top of the summer to you ALL!

This time we are hitting you with a June-July double edition, full of exciting articles and other literature for you to consume. Projects abound from Civil Engineering, Computer Engineering and Pharmacy. The renowed neuro-surgeon Dr Ben Carson's *Think Big* is our guest in this month's book review. Once again, Nati has sent us an article on woman and virtue. We are also back with the favourite Photographic Essay, featuring for the first time, Mussie Abraha, from Photo Asmara, on the glimpses of summer. A must-see Article!! Worried with Body Odour, consult Isias Okubay! To reveal or not to - Let's read what our EQ article tells us about Smart people and secrecy!

Readers can read and download this month's edition and all the previous ones for free at *Facebook/Eritrean Scientific Scoiety* and *eriyouth. org*.

Editor-in-Chief

Saba Tekeste

ASMARA CITY STORM WATER

DEVELOPMENT FRAME WORK

contributed by BINIAM MERHAWI

BACKGROUND INFORMATION

Geography

Eritrea covers an area of 125,000 km2 and has a coastline of over 1200 kilometres (km). It is situated in the Horn of Africa, neighbouring Sudan, Ethiopia, and Djibouti and bordered to the East by the Red Sea.

Climate

Eritrea is located in the Sahelian rainfall zone, with rainfall provided by the South-western monsoons. Climate ranges from hot and arid near the Red Sea to temperate sub-humid in the eastern highlands. Average annual rainfall is about 380 millimetres (mm), varying from less than 50 mm to over 1,000 mm. The rainy season for the highlands and western region extends from June to September. As a result of the topographically ragged nature of the highlands, thin soil formations and a completely deforested terrain, most of the runoff turns into violent flash floods. Asmara is the capital city and largest settlement of Eritrea sited at an elevation of 2325 meters above sea level and it is a home to population of around 649,000 inhabitants. The city is known for its well preserved colonial Italian modernist architecture (ART DECO). It is also known as "PICOLO ROMA" which means little Rome.

Asmara features somewhat rare version of steppe climate with warm but not hot summer & mild winter. Due to its altitude, temperatures are relatively mild for a city located not far from desert. The rainfall it gains is very little with short periods which are not sufficient to satisfy the required quantity of water supply especially with the increasing population and expansion of the city. Indeed, the current situation of water supply and sanitation in the city is in a critical state and this has caught attention of the Government and the public. In view of the above matter, we are convinced for our senior year project to deal with Asmara city storm water management by applying the separation of the storm and sanitary system and diversion works for the storm water of the Northern sub system.

INTRODUCTION

As water is the most precious natural resource to mankind, its presence should be continuously secured. Irrespective of how it occurs, if properly managed, it can be an instrument for economic survival and growth; also it can be an instrument for poverty alleviation, lifting people out of the degradation of having to live without access to safe water, while at the same time bringing prosperity to all.

The term "storm water management" implies a comprehensive approach to the planning, design, implementation, and operation of storm water drainage improvements. The purpose of the storm water management approach is to develop effective drainage systems that balance the objectives of maximizing drainage efficiency and minimizing adverse environmental impacts.

This Project outlines a basic framework for planning the development of storm water management systems. It deals with urban drainage system considerations and it discusses the merits of design standards for storm water facilities.

Since part of Asmara, which is the Northern Sub-System has a combined network, this management framework starts from separation of storm and wastewater as its future development is focusing on planning and designing the system in its modest way.

OBJECTIVES OF THE PROJECT

- To enhance water supply resources of the city.
- To avoid back flow of waste water to houses of low elevation.
- To prevent over flooding of waste water (minimize public health hazards).
- Reduction of waste water treatment plant running cost and size of plant.
- To reduce excessive surface runoff.

DESK STUDY AND RECONNAISSANCE

Prior to conducting the reconnaissance study, a desk study was conducted for the proposed catchment area. The aim of the desk study is to have a general overview of the study area and identify, prior to site visit, to those features that will be relevant in the hydrologic study of the catchment area and the socio-economic setting of the area of interest.

All data and maps were collected from Infrastructure office of Zoba Zaekel, Segen Construction Company, Task force office, Ministry of water, land and environment "water resource department office" and GEDECC…. etc.

From the system network map, contour map, master plan of Asmara and sat-image of the area of concern, general features of the area were studied and general outline of the topographic feature of area were observed. Summed up results of these data has enabled us in choosing of the diversion site, and the possibilities of separating the system from its combined form.

During the desk study, the main features that were discussed could be outlined as follows;
- Catchment characteristics
- Area/size of site
- Topography
- Social conditions
- Possible data collection mechanisms and approach to the project

Once it was proposed to solve the existing condition of water resource problems of Asmara city, the desk study conveys the primary target to address adequate information of the catchment area, hydrological studies and other related studies relevant to the project.

OVERVIEW OF THE DIVERSION POINT

At the point where we decided to divert the canal we ensured that the topographical feature of the area is going to have a reduced social impact to the people living around, that is comparing the surrounding area as currently the diversion point is barely used by the people living around due to the topographic feature of the area.

We also realized that we need to make a deep cut to acquire the design bed level of the diversion channel.

SITE RECCOINESSANCE

Site visit, to the streets which are commonly observed to flood during the rainy season and to the diversion site, was done so as to get the actual ground information. Regarding the conditions of flood troubled streets and the feasibility of the diversion at the selected site, as there could be any change between the release of the data to the public and the existing situation of the area.

The existing channel of Mai Bela stream at the diver-sion point is still in its natural form and this makes the benefit of not destructing an existing structure during the intersecting time of the diversion channel and the existing Mai Bela stream.

JUSTIFICATION OF THIS PROJECT

As every engineering project has to be justified before proceeding to design, this project is also justified as follows.

WHY SEPARATING STORM AND SANITARY LINES?

- The increasing water demand of Asmara and its surrounding villages can't be fully met by the existing as well as future potential dams, so there is a need to look for other options of enhancement of water.
- Since Greater Asmara Area (GAA) is still at its early stage of development, separating the storm and sanitary lines is at its right time. If it takes more time the technical, economical and other aspects of feasibility of implementing the separation work will become unrealistic. But now this can be a base for the future development of the Greater Asmara Area to have a separated system.
- Separation reduces greatly the negative environmental impact on the downstream users of Mai-Bella Riv-

er.

WHY DO WE NEED DIVERTING THE STORM WATER TO MAI-NEFHI DAM?

- While having an over-designed dam, which is the Mai-Nefhi Dam, there is no need to construct a new dam.
- Since the Mai-Nefhi Dam is equipped with a treatment plant; we still have the advantage of utilizing this treatment plant. Though this treatment plant may need certain rehabilitation but still it can function well by increasing its operation hours.
- Since there exists already installed pumps and delivery pipes on the Mai-Nefhi Dam we still have the advantage of utilizing them.
- The overall storm water of the city is to be collected in one dam; therefore we do have the advantage of managing its quality. Even if the quality of storm water gets reduced we can still control it.
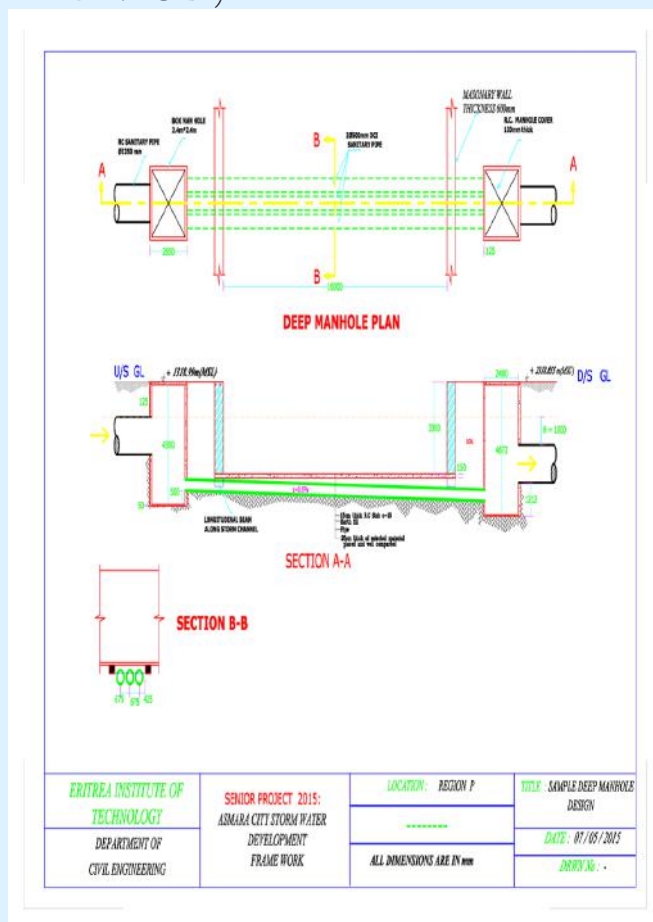
1. SANITARY SEWER DESIGN

Wastewater management in Asmara, the State Capital, has historically involved the collection and discharge of raw sewage to the natural watercourses. The sewerage

network has expanded with the growth of the city, with the discharge of untreated sewage to the natural watercourses. The increased use of this polluted discharge by farmers for irrigation is posing a danger to the health of the inhabitants of Asmara and the surrounding villages.

The design of the sanitary sewer follows the following steps:

1.1 POPULATION FORECASTING

1.2 WATER DEMAND FORECASTING:

1.3 DOMESTIC SEWAGE PRODUCTION

1.4 SEWAGE PRODUCTION FROM THE EXISTING INDUSTRIES:

1.5 TOTAL DESIGN FLOW

1.6 FINAL DESIGN USING NOMOGRAM:

1.7 DESIGN OF INVERTED SIPHON (DEEP MANHOLE):

2. STORM WATER SYSTEM DESIGN

In this project it is proposed to separate the existing combined sanitary-storm system. Since the Southern sub system is already separated, the main focus is dealing with the separation of Northern Sub System only but reviewing of the Southern Sub System is also included.

It is decided that the existing channels of the Northern Sub System is to be used for storm water. While for the

sanitary system; new pipes are going to be provided parallel, on both sides, to the storm channel. But the size of the main channels of the Northern Sub-System is going to be checked whether it is safe or not to accommodate the design flood.

2.1 ANALYSIS OF THE EXISTING STORM CHANNELS

In this project, the rational method is adopted for runoff estimation. This method is internationally accepted by various hydrologists and it is the most commonly used for peak flow estimation. It is a function of rainfall intensity (I), runoff coefficient (C), and catchments area (A). The rate of runoff will increase until the time of concentration which is when all the catchments are contributing to flow at the catchments outlet (node). This method of determining runoff is one of the simplest applications of the hydrologic equations. In fact the rational method is applicable up to 30km2 whereas it is more efficient up to 8km2.

2.1.1 CATCHMENT AREA CALCULATION (A) :

The delineated catchment is adopted from the infrastructure of Zoba Maekel office. And the area of each catchment of the Northern Sub system is calculated using the Auto-Cad software.

2.1.2 RAINFALL INTENSITY (I) : Rainfall intensity

is calculated by an empirical formula associated with Montana parameters a and b for different return periods adopted from the BCEOM study.

2.1.3 Estimation of runoff coefficient (C): In the design of storm sewers discharge, estimation of runoff coefficient(C) is required for the different types of areas. The runoff coefficient for the delineated catchment area is selected based on the following parameters:

- Characteristics of the catchment area
- Type of soil & grass land coverage
- Slope and Topography
- Future development plan of the area
- Experience and sound engineering judgment.

From the analysis performed to the storm water network system a conclusion is made that the some flooding problems in the network system is not due to the sizes of the trunk mains but mainly due to the inability of the inlets to properly drain the runoff. And this is due to their current damaged formation, insufficiency in number and sedimentation problem.

2.2 PEAK DISCHARGE ESTIMATION

We adopt the rational method because:

i. The rational method is acceptable world wise to use in urban hydrology.

ii. The flexibility of the method for changes in land use.

iii. The availability of data such as good topographic map with defined drainage areas and the IDF curve of the site.

2.3 CATCHMENT YIELD

Total yearly runoff, expressed as the volume of water entering/passing the outlet point of the catchment, is thus known as the catchment yield, and is expressed in Mm3 or Mha.m. And this will help in designing the capacity of the reservoir and fix the outflows from the reservoir. The inflows to the reservoir are however, quite susceptible of variation in different years, and may therefore vary throughout the prospective life of the reservoir. The past available data of rainfall or runoff in the catchments is therefore used to obtain the optimum value of the catchments yield. In this case Barlow's tables and Lacey's formula is used because they take in to account the catchment's characteristics and nature of seasons.

3. DIVERSION WORK DESIGN

As frequently described in the previous sections, one of the main objectives of this project is enhancing the water supply capacity of Mai Nefhi dam. And to acquire this objective the storm water collected from the Northern Sub-System needs to be diverted at the fall of

Adi Segdo. This is due to the reason that it doesn't flow naturally towards the dam site. The approaches used for designing the diversion works are as follows.
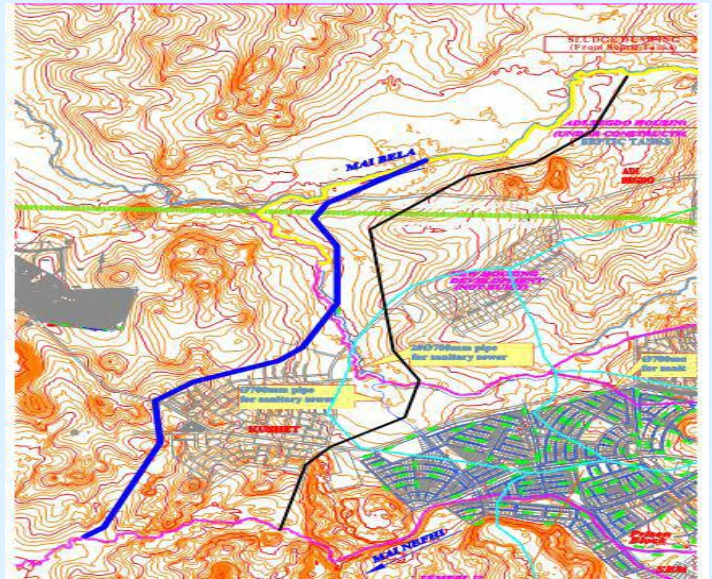
3.1 ALIGNMENT SELECTION: An alignment was selected based on the following criteria;
- Topography
- Economy
- Social and environmental impacts

3.2 Geological investigation

Once the route is selected based on the above criteria, basic geological investigation has been conducted at the route of the selected alignment by taking soil samples. The samples have been taken at points which appear to show varying properties. Then the samples were checked by a geologist (from Ministry Of Energy And Mining) to determine its soil type and general properties.

3.3 WEIR DESIGN

3.4 INTAKE DESIGN

3.5 CHANNEL DESIGN: The channel from around Paradiso to the weir site is not an artificial channel and its geometry is designed using the 50 year design discharge. The channels downstream of the gate up to the intersection with the road from Asmara to Tsaeda Christian are designed to serve for vehicular movement. Therefore proper design of all the members that is slabs, girder beams and piers is prepared.

3.6 EXISTING DIVERSION CHANNEL: There is a readily provided diversion line which directs the water from the Southern Sub-System to the dam. The channel from the Northern Sub-System is supposed to meet with this line at the upstream of Tsaeda Emba (Integrating the new diversion structure with the existing diversion work).

4. IMPACT ASSESMENTS

METHODOLOGY OF ASSESSEMENT

* From Literature
* From Research
* Prediction

4.1 ENVIRONMENTAL IMPACT ASSESSMENT: The purpose of the environmental impact assessment (EIA) of the Asmara storm water management project is to ensure that the project under consideration is environmentally and socially sound and sustainable. This EIA identifies ways of improving the project environmentally and so-cially by preventing, minimizing, mitigating, or compensating the adverse impacts. These measures will help to avoid potentially high cost remedial measures.

4.2 SOCIAL IMAPCT ASSESSMENT: The purpose of the Social Impact Assessment of ASMARA STORM WATER MANAGEMENT FRAMEWORK is to identify the possible effects that this project can create on the society, either positive or negative, and to find possible remedial for the negative impact.

Software Used

* Microsoft office
* AutoCAD
* Eagle point
* Arc GIS

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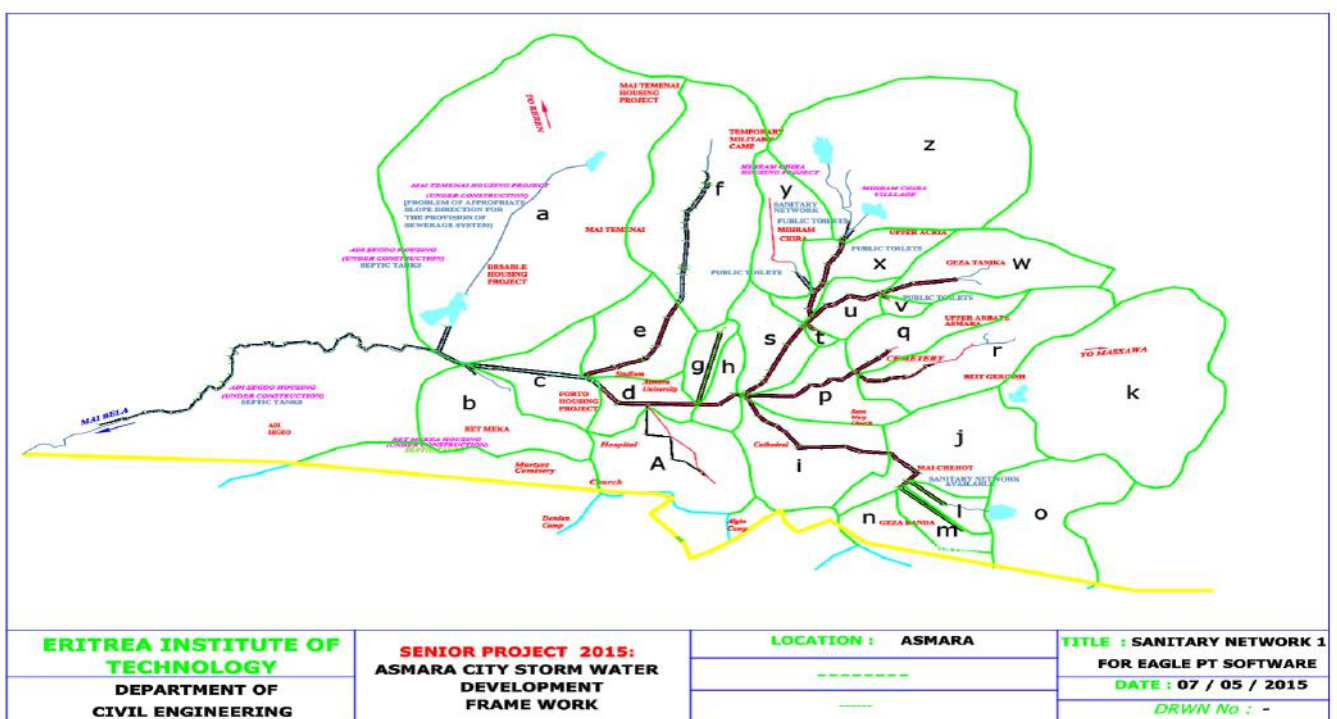
WHERE TO
APPLICATION

Yohannes Kesete , Dawit Yohannes Merhawi Tsegay
Elilta Debesay & Isaias Afewerki

Introduction

Location based maps applications has become the center of interest of many large and small companies. Different maps were developed high level of precise and for many countries, high level of details. Although the number of resources dedicated for this kind of large project, the reliability for many countries (Specially, developing countries) in terms of details level is quite low. Open sources and API's are being developed to encourage developers all over the world to develop their own navigation applications for their cities and towns using their local maps. In addition, even if

there are some applications with the ability of using multiple maps, they lack some essential utilities, specially the ability of using offline maps. Also, some of these applications do not give the user enough flexibility to control the user interface of the application, which can be disturbing for many users. Asmara is not an exception from this equation. The level of details is low and needs to be enhanced. Unfortunately, even if there were a local map for Asmara, existing application can't use this local map. The main problem this project is dedicated to solve is to develop a location based map application for Asmara with the ability of

using various online and offline maps and navigation features with the ease of use and easy interface.

Eritrea is one of the developing countries that need a lot of attention in order to improve the life style of its citizen. Technology needs to be improved on many aspects, and location based navigation is not an exception. Asmara city is big enough to require a well implemented navigation system to facilitate the movement inside the state. Applications like Google maps, have some restrictions and boundaries for some countries like Eritrea. It's better to have a navigation application that overcomes these limitations. Android development becomes one of the leading fields these days, developing has become more interesting and fun for developers with the interesting new interfaces and flexible APIs, so it's not unexpected to provide APIs for Location based mobile maps application development for users to develop their own applications with more flexibility and interest. This project can be a start to aware and increase android developers in Asmara, so this field can become more advanced in our country.

Objectives & Existing System

This project is an android application intended to facilitate the ongoing request for directions, usually from tourists, or in some cases locals living on far sides of the city, hopefully diminishing this problem by providing the users with a straight forward location upon their requisition through an aesthetically pleasing map and directional instruction on arriving there. This application was developed because despite our city being geographically small, still it has a lot of places that tourists find worth visiting and they may have problems communicating with the locals or find it difficult or not to their standards or financially unethical to hire a stranger as a tour guide. So by using this app they can get to the place they want to go by just providing the name of their destination and the application will immediately mark a route from a default position to their destination. The users of this system are mainly guests or tourists coming to Asmara or even any citizen who doesn't necessarily know his/her way around our city. To ease this we have devised this simple but vibrantly assistive application, where the users just need to install the application, enter their destination & that's it. So far there are no existing maps specifically for Asmara city i.e. anyone has to directly go on to web-giving services to attain Asmara maps which can be tiresome. But by our efforts we are planning to make it a dependable resource for touring purposes and other because there is not a simple yet elegant application that can be used.

Technical and Functionality Description

1. Home Page

This page has an action bar that contains the icon of the application on the top left and the settings button on

the top right. It also contains zoom in and out buttons with the current location button, all three buttons aligned in a horizontal orientation next to each other on the bottom left side. On the right alignment just below the action bar, we encounter a GPS status indicator and correspondingly on the parallel left side we have a compass with the latitudinal and longitudinal locations. The remaining part of the activity is composed of the map image overlaid throughout the page.

2. Menu Button

• Start Tracking:- obtains the current location from GPS for every assigned value of steps (described later in the steps option) starts to record and track every step the user makes and presents the findings by marking it with a red line. Once the start tracking choice is activated it can be turned off from that same location in the combo box which has now been converted to Stop Tracking. After you do this double operation, the track it traced has been loaded into the database with your choice of naming and can be retrieved later as/when required.

• Tracks:- Associated with the previously mentioned option, and it hold the record of every track you have initialized and stored. The user accesses or queries the tracks from this option.

• POIs:- abbreviation for point of interest, is a user-modified spotting mechanism which makes use of the user's personal preferences. By simply long pressing on a desired location, the user renames the latitudinal and longitudinal representations of a place mark and provides his own name of choice. This is mainly applicable when renaming the coordinates of places where the user usually travels a lot or has the willingness to do so. For example a user can rename the coordinates of his home, school, workplace, and other personal places and can later just retrieve them from the database using the names he/she provided instead of searching on the map which is also possible but tiresome.

• Maps:- One might ask what is the need for such an option because there is only one map of Asmara provided. While this case is totally true and acceptable, we have been having some issues with the Asmara map (probably because there is so very little information about it on the web) i.e. Google could not provide us with one single map that attains all our desires so instead we have provided the customer with three different maps of Asmara city each of which consisting tiles of graphs of maps which are not necessarily contained in one of the other two. These maps are Asmara_Osmstreetmap, Asmara_Google, and Asmara_Public_Transport. If the map zoom levels or any other functionality is not operable on the default maps, user just needs to visit these option and probably will find his needs in the second maps, if not definitely in the third map.

Maps Settings

• Settings:- contains the map folder destination, the current map you are working with, the size of the map tile having small(128), medium(256), large(512) & very large(1024). The settings also has tracking steps which when Start Tracking option is activated record the trace steps by every number given here (ranging from 1-10 steps). If the user is travelling short distance, it is recommended to select small tracking steps while if travelling longer distance higher value of steps.

• Exit:- terminates every action and exits the application.

• About Us:- textual information and background about the developers/development of this application.

Challenges & Future Enhancement

As having been mentioned earlier, this application will attempt to tackle any shortcoming when exploring Asmara. We are hoping to have influenced and helped out a lot of users especially our particular customers which as mentioned earlier are hoping to be tourists. This application we are sure will have a resounding perspective on the way tourists have been exploring this beautiful city.

Although we are proud to distribute this application to the rest of the world, the tiresome and extensive route to make this project become a reality has taught great lessons. This project has taught us to pull our socks up and reach to our maximum potential despite the continuous obstacles we were encountering in source coding and particularly network connection in a third world country, resulting in a few drawbacks and shortcomings which will be listed below in our future enhancement plans to be undertaken in the near future.

But most of all the major obstacle relating to our project was the inability of the Google map providers to comply with our registering of the API keys. Since you have to be online to register for the Google maps' API keys we had to numerously change stations to fulfill our needs. It also takes a lot of time to render the maps even once you have found them. That's why we had changed our source to Open Street Map (OSM) resulting in new and unintended APIs like Graphhopper, Route-Converter and Osmdroid. A network connection was also the reason for us not integrating automatically routing to the application.

With the project being in school time, we not getting enough resources and having to build our knowledge of android programming from scratch, the internet connection being not to the application standards and a few other reasons, we are left with some features and properties that we didn't incorporate in this software but are planning to implement them once we get a hold of all the limitations mentioned above.

• We are planning to implement Tigrigna language in the application to be used by the locals.

• We are planning to include routing and updated navigation in the software which we were unable to do because of a limited bandwidth length in Eritrea.

• We are planning to have a full information and textual description to the tiniest detail about a location.

FAQs

Q) When using your application, sometimes we were unable to find the desired places we wanted despite the GPS being activated. What could be the possible reason for this mishap?

A) Well the first thing you could do is to try and search the places by using the three different types of maps we have provided. The reason for this is since some of the maps are found in through various perspectives of the satellites we had to accommodate the possible categories. So what you need to do is go to the settings combo box on the

top right corner (portrait view) then go to maps and choose another one of the two maps you haven't used earlier and try again. If after all three maps the desired map is still unapproachable then please contact us and we'll try to encompass the malfunction in the future enhancement plan by searching another new possible satellite perspective.

Q) In your application it says that you have to activate GPS and then you can start tracking. But sometimes it takes ages to load the GPS resulting in frustration and termination of the application. What can you possibly do to overcome this problem?

A) Dear user, have you noticed any smart phone is equipped with GPS (in some the label is location) and it is mandatory to operate. The reason why it is taking a great deal of time to boot is because you are indoors or in a confined place. So every time you want to use our application, be out in the open before activating the GPS so the satellite can track you. Even you'll need it for tracking so you might as well be outside when initiating it.

Q) Why does the application fail to comply with my POIs when I reinstall the application?

A) When first installed, the application has to load the databases where you can store your POIs and tracks. In order to facilitate this it automatically loads the databases into the internal memory storage of your phone. So when uninstalling the databases will still remain in your phone causing mass confusion upon installing again. So what you have to do is every time you uninstall the application from the phone, manually go to storage/emulated/0 and you will find four .sqldb files and delete them from your phone. This way next time you want to install it, the application will have new database files and will function satisfactorily.

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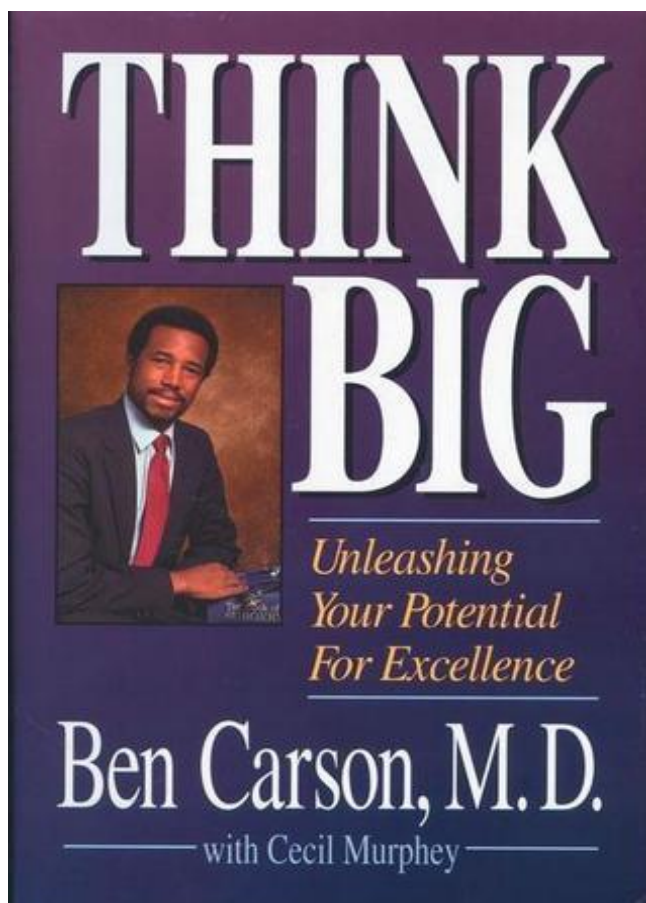- http://www.stackoverflow.com

contributed by
NAHOM WOLDAY

Book Title: Think Big-Unleashing you Potential for Excellence
Author: Ben Carson with Cecil Murphey
Category: Biography and Autobiography/Religious
ISBN-10:0-310-21459-9
ISBN-13:978-0-310-21459-5

Ben was considered the dumbest kid in his class. And before long he too began to feel as though he really was the most stupid kid in the fifth grade. Despite his mothers frequently saying, "You're smart, Bennie. You can do anything you want to do-only you can do it better!," though he didn't believe her.

One evening his mother came home about an hour before their bedtime. He and his brother Curtis were watching TV. She walked across the room, snapped off the set , and faced both of them."Boys", she said, "you're spending too much of your time in front of that television. You don't get an education from staring at television all the time". From then they were allowed to watch TV for two preselected programs each week. In addition they had to read two books from the library each week. And write a book report. At first they didn't like it but they obeyed what their mother told them. This way Ben raised to the top of his class by the mid of sixth class.

About the book

This book is for you if your life is a series of shattered dreams.This book is for you if you have no dreams at all. It's for you if you have bought the lie that you will never amount to anything. That's not true. Your life is BIG-far bigger than you have imagined. Inside these pages lie the keys to recognizing the full potential of your life. You won't necessarily become a millionaire (though you might), but you will attain a life that is rewarding, significant, and more fruitful than you ever thought possible. The author of the book knows about hardship. Ben Carson grew up in inner-city Detroit. His mother was illiterate. His father had left the family. His grade-school classmates considered Ben stupid. He struggled with a violent temper. In every aspect, Ben's harsh circumstances seemed only to point to a harsh future and a bad end. But that's not what happened. By applying the principles in this

book, Ben rose from his tough life to one of amazing accomplishments and international renown. He learned that he had potential, he learned how to unleash it, and he did. You can too. Put the principles in this book in motion. Things won't change overnight, but they will change. You can transform your life into one you will love, bigger than you've ever dreamed.

From his words "Over the years I have urged others to give their best, to seek for excellence, and to Think Big. One day I was mulling over those two words and I worked out an acrostic for it. Although the eight letters of Think Big do not express all my thoughts or put them in any particular order, the acrostic does provide a way for me to talk about the success in my life and about giving my best for others.

T=TALENT

If you recognize your talents and use them appropriately, and choose a field that uses those talents, you will rise to the top of your field.

H=HONESTY

If we live by the rule of honesty and accept our problems, we can go far down the road of achievement.

I=INSIGHT

If we observe and reflect and commit ourselves to giving our best, we will come out on top.

N=NICE

If we are nice to others, others respond to us in the same way, and we can give our best for each other.

K=KNOWLEDGE

If we make every attempt to increase our knowledge in order to use it for human good, it will make a difference in us and in our world.

B=BOOKS

If we commit ourselves to reading thus increasing our knowledge, only God limits how far we can go in this world.

I=IN-DEPTH KNOWLEDGE

If we develop in-depth knowledge, it will enable us to give our best to others and help to make a better world.

G=GOD

If we acknowledge our needs for God, he will help us.

About the author

Ben Carson is a professor of neurosurgery, plastic surgery, oncology, and pediatrics, and the director of pediatric neurosurgery at Johns Hopkins Medical Institutions. He is also author of two other bestselling books-Gifted Hands and the Big Picture. A widely respected role model, he spares motivational insights with inner-city kids and corporate executives alike. He lives with his family in Baltimore County, Maryland.

WATER DANCE

The shot taken at an angle captures
the water droplets dancing off the gutter
and the container. Breathtaking!

Beles: Fruit-King of Summer

What is a summer without a 'beles'? A bloosoming Beles is depicted here against a gleaming aura of golden sun rays.

On the left, fully grown ripe Beles , casting a wonderful colour combination of green, red, orange and yellow, are displaced for buyers to pick at a typical beles vendor. Yummy!!

Flowers:

Rain has passed away! It is time to bloosom
and rise from the ground. The photographer's
blurring technique is spelendid as it casts out
the prinicipal objects against a harmonious background.

HEPATOPROTEC-TIVE EFFECT OF AQUEOUS EXTRACT OF *Justicia schimperiana* ON PARACETAMOL INDUCED HEPATOTOXICITY IN RABBITS

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ABSTRACT

Objective: The aim of this re-search is to evaluate the hepa -toprotective effect and promote further pharmacological study on the aqueous extracts of Justicia schimperiana so that it would be safely used as a remedy.

Methodology: The present study is an experimental research aimed at assessing the hepatoprotective effect of the aqueous extracts of Justicia schimperiana in New Zealand White rabbits. In this study variables were controlled and manipulated directly to ob -serve and easure the effect of treatment given to experimental groups. Accordingly, a number of biochemical/ Liver function tests were made for both control and experimental groups and finally the results were computed statis -tically using Analysis of Variance (ANOVA).

Results: Administration of Paracetamol (2000mg/kg, p.o.) produced a significant rise in se-rum enzyme levels. The groups (pre-treated with Justicia schim -periana extracts) showed reduced serum enzyme levels as compared to Paracetamol control group. Justicia schimperiana extract at 1000 mg/kg dose produced sig -nificant results as compared to Paracetamol control, when given as prophylactic. Moreover, Justi -cia schimperiana extract at 1000 mg/kg dose showed low hepa-tocurative effect as compared to Parac-etamol control and the pre-treated groups.

Conclusion: The present study suggests that the aqueous ex -tract of Justicia schimperiana at a dose of 1000 mg/kg possesses potent hepatoprotective activity in Paracetamol-induced liver inju -ry in New Zealand White Rabbits.

Key Words:

INTRODUCTION

The liver may be considered as the most important organ in drug toxicity because it is functionally interposed between the site of absorption and the systemic circulation and is a major site of metabolism and elimination of foreign substances. Hence, these features render it a preferred target for drug toxicity. Drug-induced liver injury (DILI) therefore poses a major clinical problem. One of the most intriguing features of DILI is the fact that it can mimic all forms of acute or chronic liver disease. Among the frequent causes of DILI is Paracetamol(1). Certain medicinal agents when taken in overdose and sometimes when even introduced within therapeutic ranges may injure the organ. Other chemical agents such as those used in industries and laboratories and natural chemicals (e.g. microcystin) can cause hepatotoxicity. Chemicals that cause liver injury are called hepatotoxins (2). Paracetamol, although considered safe at therapeutic doses, produces a centrilobular hepatic necrosis that can be fatal at higher doses. The mechanism occurs by a complex sequence of events. These events include: (1) CYP metabolism to a reactive metabolite which depletes glutathione and covalently binds to proteins; (2) loss of glutathione with an increased formation of reactive oxygen and nitrogen species in hepatocytes undergoing necrotic changes; (3) increased oxidative stress, associated with alterations in calcium homeostasis and initiation of signal transduction responses, causing mitochondrial permeability transition; (4) mitochondrial permeability transition occurring with additional oxidative stress, loss of mitochondrial membrane potential, and loss of the ability of the mitochondria to synthesize ATP; and (5) loss of ATP which leads to necrosis(3).

Justicia schimperiana (Hochst. ex Nees) T. Anderson is a perennial herb or shrub which is up to 0.8–3 m tall. Leaf-blades lanceolate are, up to at least 12 x 5 cm, sparsely pubescent with c. 0.3 mm long hairs especially along veins, apex acute, base shortly attenuate; petiole up to c. 3 cm long. It is distributed in eastern African countries, such as Eritrea, Ethiopia, Somalia, and Kenya. Commonly it grows in moist montane forests and shrubs, often along streams, occasionally margins of coffee plantations, waste ground and villages. Traditionally, fresh leaves of the plant are used to cure evil eye (traditional belief), hepatitis B, madness, over sweating and fever. The combination of the extract of J. Schimperana , cinna -mon and brown honey produced a broad spectrum antifungal ac -tivity against Candida albicans(4). Justicia schimperiana was found to have anti-inflammatory activi -ty and a relatively potent relaxant (bronchodilator) effect on the tra -cheal chain of the guinea pig (5).Therefore, the current research was done to evaluate the hepa-toprotective effects of Justicia schimperiana in Paracetamol induced hepatotoxicity in New Zealand White Rabbits as this plant has been traditionally used as a treatment for several hepatic diseases.

MATERIALS AND METHODS

Plant collection and extraction The EIT department of Botany herbarium was used as reference for Plant Identification. Fresh leaves of Justicia schimperiana were collected in the month of October 2015 from the province of Adi Quala, Zoba Debub. The leaves were identified and au -thenticated by the Department of Botany, Eritrean Institute of Technology (EIT), Mai Nefhi. The authenticated leaves of Justicia schimperiana were cleaned, washed and shed dried for 7 days and powdered. The pow-der (460.3g) was then macerated in distilled water for 36 hours with frequent agitation and the liquid was filtered using what -mann filter. The extract was then concentrated using a water bath at a boiling temperature not ex -ceeding 100oc for 30 minutes. The concentrate was dried in hot air oven at a temperature of 40oc. The resulting dried mass of extract (Yield: 14.2%) was pow -dered, weighed, and placed in a glass container until use.

Animals

Thirty New Zealand White rab bits (0.9 - 1.5Kg) were procured from the Eritrean National Breeding center, Ministry of Agricul ture. The rabbits were fed with standard diet and clean water throughout the experiment. The rabbits underwent a one week acclimatization period and were later randomly distributed into 5 treatment groups of five animals each Acute toxicity testing Acute toxicity study by oral route was carried out in four animals (2 males and 2 females) to ascer-

tain for any mortality at the dose level of 2000 mg/kg reported earlier USFDA (1988) as LD50 in rabbits. Observations were made for any physical manifestations at 1, 2, 4 and 8 hours after oral adminis -tration. This included changes in behavior. Observation was made for any mortality during the 24 hour following administration of the test materials. Since literature regarding acute toxicity is not available, the animals were not sacrificed but were maintained for another 14 days with a once daily observation.

Experimental design

Studies were conducted to get data on pharmacological sig-nificance of biochemical as well as behavioral alterations conse -quent to repeated daily admin-istration of the Justicia schim -peri-ana extracts to correlate pharmacological significance of biochemical changes found dur-ing daily treatment.Dose regimen was based on the maximum tolerated dose (without any mortality) observed in the acute study. For the extracts one-half of the maximum dose tested and found tolerated i.e. 1000 mg/ kg was given. Test doses were prepared daily and the dose volume was adjusted to 4 ml. During the treatment period, feed and water consumptions were recorded. The animals were monitored daily for any toxic manifestation. The body weight changes were re-corded every 3 days.The animals were divided into five groups of six animals each.

Group I

Animals were kept on standard animal diet and served as normal control and received distilled wa -ter (3 ml/kg, p.o.) daily;

Group II

These animals served as extract control and received extract at a dose of 1g/kg daily.

Groups III

These animals received extract at a dose of 1g/kg for 3 days. Start -ing on the 4th day, they received Paracetamol (2g/kg) 2 hours after receiving the extract.

Groups IV

These rabbits further received Paracetamol (2g/kg) for 3 days. Starting from day 4, 2 hours after receiving Paracetamol, they were given extract at doses of 1g/kg.

Group V

Animals in this group served as Paracetamol control and received Paracetamol at a dose of 2g/kg daily. The animals were treated for 10 days. Blood was withdrawn periodically on the 5th, 7th and 10th days. The mid line artery of the ear was used for blood collection. The area was primarily cleaned with alcohol swab and small nick was made in the artery and blood was collected in Test tubes. The blood samples were kept in slant until they were centrifuged and the serum was collected and refrigerated after which they were analyzed.

Biochemical assays

Serum was separated by centrifugation at 3000 rpm for 5 min and the clear supernatant was subjected to biochemical evaluations. Liver function was assessed by estimation of complete liver panel, using an automatic blood biochemical analyzer present at Sembel hospital, Asmara.

Statistical analysis

Values were represented as mean ± SEM and data was analyzed by one way ANOVA analysis. Values were taken as significant $p < 0.01$ and $p < 0.05$.

Phytochemical analysis

The extract of Justicia schimpe -riana was subjected to different phytochemical analyses for the detection of Alkaloids, Saponins, Tannins, Flavonoids,and Terpenoids.

RESULTS

Administration of Paracetamol (2000mg/kg, p.o.) produced a significant rise in serum en -zyme levels, namely ALT, AST, ALP, GGT, Total Bilirubin, and Al-bumin. The protective action of Justicia schimperiana extracts on Paracetamol induced hepatotoxicity has been summarized in the tables 1, 2, and 3. The groups (pre-treated with Justicia schimperiana extracts) showed reduced levels of ALT, AST, ALP, GGT, Total Bilirubin, and Albumin as compared to Paracetamol control group.

Justicia schimperiana extract at 1000 mg/kg dose produced significant results as compared to Paracetamol control, when given as prophylactic. Moreover, Justicia schimperiana extract at 1000 mg/kg dose showed low hepa-tocurative effect as compared to Paracetamol control and the pre-treated groups. ANOVA test was used to com-

pare the variation between treatment groups. '*' in-dicates comparison of treatment groups with Control while '^' indi cates the comparison of the treat -ment groups against Paracetamol group.

DISCUSSION

One of the mechanisms of Paracetamol-toxici-ty involves Ox -idative stress that are related to radicals generated during metab -olism of Parac-etamol by the cyto -chrome P-450 system to form

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			Day Four Measure			
Treatment	ALT	AST	ALP	GGT	Total Bilirubin	Albumin
Control						
Extract						
Pre-treated						
Post-treated						
Paracetamol						

Table 1: Day Four Measure ... n=6, *, **P < 0.01 and **, ***P < 0.05 '^compared with Paracetamol, *compared with control'

			Day Seven Measure			
Treatment	ALT	AST	ALP	GGT	Total Bilirubin	Albumin
Control						
Extract						
Pre-treated						
Post-treated						
Paracetamol						

Table 2: Day Seven Measure ... n=6, *, **P < 0.01 and **, ***P < 0.05 '^compared with Paracetamol, *compared with control'

			Day Ten Measure			
Treatment	ALT	AST	ALP	GGT	Total Bilirubin	Albumin
Control						
Extract						
Pre-treated						
Post-treated						
Paracetamol						

Table 3: Day Ten Measure ... n=6, *, **P < 0.01 and **, ***P < 0.05 '^compared with Paracetamol, *compared with control'

The extract of Justicia schimperiana was subjected to phytochemical analysis

Type of Test	Result
Alkaloids	+
Flavonoids	+
Saponins	+
Tannins	+
Terpenoids	+

the toxic metabolites N-acetyl P-ben -zoquinine imine, which produces oxidative stress and causes glyco -gen and glutathione depletion by irreversible conjugation with sulf -hydryl groups of glutathione(6).A variety of markers of liver injury or function are widely used in the detection of injury, assessment of injury type and severity, determi -nation of functioning liver mass, prognosis, and response to medi-cal management(7). ALT, AST, enzymes leak out and eventually enters into the blood plasma when liver cells are in-jured. Elevations in the activi -ties of ALT and AST were seen in rabbits treated with toxic doses (2g/kg) of Paracetamol and were proven to be sensitive indices of hepatotoxicity and oxidative stress (8). This was consistent with the current study where in-creased enzyme levels was seen in the Paracetamol only group.Serum alkaline phosphatase in -creases to some extent in most types of liver injury of which the highest concentrations are ob -served with cholestatic injuries (7). Increases of plasma GGT have been reported following cho-lestasis in rabbits, where GGT changes are more specific than those observed for ALP, even though the basal plasma GGT levels are very low (8). This was consistent with the current study, where the ALP and GGT levels of the Paracetamol only treated rab -bits were significantly higher than the normal control group(P<0.01) at the end of day 10.Hypoalbuminemia can be deemed as useful index of sever-ity of hepatocellular damage. The lowered levels of albumin shown in the serum of Paracetamol-treated rabbits reveal the severity of hepatopathy(10).In the present study, albumin concentration was very low in rabbits treated with Paracetamol alone compared to Normal. This is expected, since Paracetamol is a well-established hepatotoxin which decreases synthesis of albumin, which is normally associated with liver pa -thology. The Paracetamol group showed elevation of total serum biliru -bin compared to normal control group. High levels of total biliru -bin in the Paracetamol-induced toxicity may indicate severe ill -ness attributed to the damaged structural integrity of the liver, because they are cytoplasmic in location and released into circu -lation after cellular damages (11). A study conducted on Hepa-toprotective Activity of Lig -nan Compound from Flaxseed (Linumusitatissimum L.) Against Paracetamol Induced Hepato -toxicity in Rabbits by Essam et al., showed reduced serum albu -min and

bilirubin levels (P<0.05) with treatment of the extract compared to the Paracetamol group(12). The present study also showed that pretreatment with Justicia schimperiana of-fered hepatoprotection as evi -denced by significant reduction of the rise in concentration of bilirubin and albumin compared to Paracetamol group. This sug -gests the possibility of Justicia schimperiana being able to sta -bilize biliary dysfunction in rabbit liver during hepatic injury with Paracetamol. Jalil et al., evalu -ated the Hepatoprotective Effect and Phytochemical screening of Alhagimaurorum Boiss (Legumi-nosae) Against Paracetamol-In -duced Hepatotoxicity in Rabbits and found that the extract de -creased the levels of ALT, AST, ALP, and Bilirubin with significant val -ues (P<0.01 and P<0.001) which was similar study with the current study (13). This may be due to the presence of similar phytochemi-cal constituents such as Alkaloids, Flavonoids, Saponnins, Tannins, and Terpenoids.Natural compounds that reduce the chemical activating enzymes, or that scavenge free radicals generated, might be good can -didates for protection against Paracetamol induced liver toxic -ity (14).According to Dhankhar et al, crude extracts of the species of Justicia schimperiana constitute alkaloids, sterols, triterpenoids, saponins, flavonoids, coumarins with potent antioxidant activ-ity (15).Tannins and certain flavo -noids have potential for free radi -cal scavengers, and their activity against the DPPH (1, 1 Diphe-nyl-2-picrylhydrazyl Radical) is great -ly associated with their chemical structure(16). Coumarins are also well documented for their anti-oxidant and hepatoprotective actions(17).Saponins inhibit lipid peroxidation by scavenging reac-tive oxygen species (16). Hence, the change in the serum levels of Liver Parameters might be due to the antioxidant effects of these constituents of Justicia schimpe -riana which could have helped in reducing the cell death or their toxicity.During the early stages of Paracetamol induced hepato -toxicity, Kupffer cell activation is known to lead to increases in pro-in-flammatory cytokines. TNF-α has been linked to increased oxidative stress, and is known to recruit and activate other inflam -matory cells(18). This indicates that inflammation has a signifi -cant role in hepatocyte damage and necrosis, which results in re -lease of ALT, AST, ALP, and GGT with subsequent rise in serum levels of these aforementioned enzymes. Chemical constituents

of Justicia schimperiana with anti-inflammatory effects such as lignans and coumarins could have been responsible for the alleviation of inflammation and thus could have played a role in reducing the liver enzymes. Lig -nans are well renowned for their hepatoprotective effects, anti-in -flammatory indications, as well as lipid peroxidation inhibition. The lignan, Elenoside, has lipid peroxi -dation inhibitory and anti-inflam-matory activities(19). Umbelif-erone, a coumarin isolated from the species of Justicia showed anti-inflammatory effects (17). The presence of these chemical might have played a major role in alleviating the Paracetamol toxic -ity and could have provided the hepatoprotective effects of Justi -cia schimperiana.

CONCLUSION

The present study suggests that the aqueous extract of Justicia schimperiana at a dose of 1000 mg/kg p.o. possesses hepatopro-tective activity in Paracetamol-induced liver injury in New Zea -land White Rabbits. The aqueous extract of Justicia schimperiana didn't show significant hepato-curative effect in Paracetamol induced hepatotoxicity in New Zealand White Rabbits. The aqueous extract of Justicia schimperiana restored the liver enzymes thereby reducing del -eterious effects of Paracetamol. These observations provide bio -chemical data supporting the tra -ditional uses of Justicia schimpe-riana for the treatment of hepatic disorders and suggest the pos-sible utilization of this plant as a source of new prophylactic drug.

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What actually causes body odor?

It's never as smelly as you think it is

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By **ISIAS OKUBAY**

What actually causes body odor?

It's never as smelly as you think it is
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Body odor is a universal human experience. As such, we as a species put a lot of time, money, and effort into finding ways to eliminate unpleasant natural stenches. But most of us put less time, if any, into understanding what actually causes our malodorous condition. But understanding the processes that create b.o. is the first step to creating a less smelly future.

George Preti, an organic chemist at the Monell Chemical Senses Center in Philadelphia, says the amount of odor you produce—and the power of its stench—is actually based in-part by your genetics, which help determine what types of molecules your body produces, and in what quantity.

And your body is truly a b.o. wonderland: different regions of the body produce their own strange molecular secretions and play host to different sorts of microbes. In order to generate odor, you need the proper combination of microbes and secretions. That blend only happens in certain prime locations.

The human body has two types of sweat glands: eccrine and apocrine. Eccrine glands are present all over, and typically secrete sweat that is mostly made of water. Their purpose is to keep your body cool when you're exposed to heat or enduring intense exercise. Apocrine glands, however, are located in targeted areas of the body—the armpits, for example—and they don't really do much to cool you down. Instead they release proteins and lipids, and those molecules are the real smell culprits. Bacteria that live on the outside of your armpits feed on

the secreted lipids, allowing them to thrive. They also disrupt the outer shell of the proteins that are secreted, releasing odor.

All the teeny tiny organisms on your skin interact with your body in some form or another, and they are all capable of instigating some sort of odor. The reason certain odors are worse than others, says Preti, is because microbes become ecologically adapted to the environments that they are in. At some point, some kind of microbe-induced smell might have served a purpose. Studies in other animals have found that such odors can have physiological effects on the body that promote reproduction, which in turn helps you pass on your genes and create new humans for microbes to feast on.

These days, we tend to do everything we can to mask and eliminate these odors. But Preti says a lot of our most common efforts are misguided. Despite popular belief, Preti says, eating spicy food, onions, curry, or garlic is not going to make your body produce more potentially smelly proteins. But certain foods can still make you smell worse: if pungent foods contain fat-soluble compounds that dissolve in your body fat, they'll often get released in your sweat. So you won't make more odor proteins, but you may add a note of garlic to your signature perfume.

But one popular theory—that the sweat you produce when you are nervous is more smelly than the sweat you produce if you are trying to cool yourself down—is actually quite true. That's because the sweat you produce as a result of an anxious moment contains more apocrine secretions, which are the ones that contain those smell-inducing proteins.

If you are trying to reduce the odor you produce, Preti says that deodorants and antiperspirants do a decent job (deodorants mask the smell with a fragrance while antiperspirants reduce the amount of sweat). As for probiotic deodorant, which is meant to promote certain bacterial colonies over others, Preti says until evidence-based research shows certain strains are significantly effective, consumers should be wary of the claims made by these products. His biggest piece of advice, rather, is just trying to relax throughout the day. Do your best not to provoke those apocrine glands.

But your big takeaway should be this: you're almost certainly less smelly than you think you are. "I've smelled so many T-shirts of people who come into our lab saying that they have the worst body odor in the world," Preti says. "We smell it using a rating scale, and it's hardly ever bad." Humans tune out the smells we smell all the time, but when

Body Parts Affected by Body Odor

- Feet
- Genital area
- Armpits
- Mouth
- Scalp

Top 10 Home Remedies

HOME REMEDIES FOR Excessive Sweating

Apple Cider Vinegar
1. Mix 2 tsp organic apple cider vinegar in a glass of water.
2. Add equal amount of honey to it.
3. Drink it once daily on an empty stomach.

Baking Soda
1. Mix 1 tsp baking soda with enough water to make a thick paste.
2. Add 3 or 4 drops of any essential oil.
3. Apply this to your armpits & other parts that sweat a lot. Wash it off after 15 to 20 min.

OTHER REMEDIES

Sage   Black Tea   Tomato Juice

Lemon   Coconut Oil   Witch Hazel

To explore more, visit www.Top10HomeRemedies.com

you're hit with a spike in smelly sweat, you're likely to imagine it's worse than it is—because your nose has a front row seat. "But they are not producing the odor at social distances," Preti says. "That would be an extremely unusual case."

So if you think you have the worst body odor in the world, you probably don't. And the odor that you do produce isn't really your fault—it's just the interaction of your naturally-produced proteins with typically harmless bacteria on your skin. And if you are still concerned, just ask a considerate friend (who is standing an appropriate distance away) if they can smell anything funky. The answer will probably be no.

8 Things Smart People Never Reveal About Themselves At Work

Human Behaviour in Numbers

In the following series, Dr. Travis Bradberry's captivating lessons on Emotional Intelligence wil be covered. Dr. Travis Bradberry is an award-winning co-author of Emotional Intelligence 2.0 and the co-founder of TalentSmart® the world's leading provider of emotional intelligence tests and training serving more than 75% of Fortune 500 companies. His bestselling books have been translated into 25 languages and are available in more than 150 countries.

At work, sharing the right aspects of yourself in the right ways is an art form. Disclosures that feel like relationship builders in the moment can wind up as obvious no-nos with hindsight. Trouble is, you can't build a strong professional network if you don't open up to your colleagues. Doing so is tricky, because revealing the wrong things can have a devastating effect on your career.

You must know where the line is and be careful not to cross it, because once you share something, there is no going back.

TalentSmart has tested more than a million people and found that the upper echelons of top performance are filled with people who are high in emotional intelligence (90% of top performers, to be exact). Emotional intelligence is the "something" in each of us that is a bit intangible. It affects how we manage behavior, navigate social complexities, and make personal decisions that achieve positive results.

Emotionally intelligent people are adept at reading others, and this ability shows them what they should and shouldn't reveal about themselves at work. They know better than to reveal any of the following, because these things will send your career careening in the wrong direction.

1. Your political beliefs.
People's political beliefs are too closely tied to their identities to be discussed without incident at work. Disagreeing with someone else's views can quickly alter their otherwise strong perception of you. Confronting someone's core values is one of the most insulting things you can do. Granted, different people treat politics differently, but asserting your values can alienate some

people as quickly as it intrigues others. Even bringing up a hot-button world event without asserting a strong opinion can lead to conflict. People build their lives around their ideals and beliefs, and giving them your two cents is risky. Be willing to listen to others without inputting anything on your end because all it takes is a disapproving look to start a conflict. Political opinions are so deeply ingrained in people, that challenging their views is more likely to get you judged than to change their mind.

2. That you think someone is incompetent.
There will always be incompetent people in any workplace, and chances are that everyone knows who they are. If you don't have the power to help them improve or to fire them, then you have nothing to gain by broadcasting their ineptitude. Announcing your colleague's incompetence comes across as an insecure attempt to make you look better. Your callousness will inevitably come back to haunt you in the form of your coworkers' negative opinions of you.

3. How much money you make.
Your parents may love to hear all about how much you're pulling in each month, but in the workplace, this only breeds negativity. It's impossible to allocate salaries with perfect fairness, and revealing yours gives your coworkers a direct measure of comparison. As soon as everyone knows how much you make, everything you do at work is considered against your income. It's tempting to swap salary figures with a buddy out of curiosity, but the moment you do, you'll never see each other the same way again.

4. That you hate your job. The last thing anyone wants to hear at work is someone complaining about how much they hate their job. Doing so labels you as a negative person, who is not a team player.

This brings down the morale of the group. Bosses are quick to catch on to naysayers who drag down morale, and they know that there are always enthusiastic replacements waiting just around the corner.

5. What you do in the bedroom. Whether your sex life is out of this world or lacking entirely, this information has no place at work. Such comments will get a chuckle from some people, but it makes most uncomfortable, and even offended. Crossing this line will instantly give you a bad reputation.

6. What you think someone else does in the bedroom. A good 111% of the people you work with do not want to know that you bet they're tigers in the sack. There's no more surefire way to creep someone out than to let them know that thoughts of their love life have entered your brain. Anything from speculating on a colleague's sexual orientation to making a relatively indirect comment like, "Oh, to be a newlywed again," plants a permanent seed in the brains of all who hear it that casts you in a negative light. Your thoughts are your own. Think whatever you feel is right; just keep it to yourself.

7. How wild you used to be. Your past can say a lot about you. Just because you did something outlandish or stupid years ago doesn't mean that people will believe you've developed impeccable judgment since then. Some behavior that might qualify as just another day in the typical fraternity (binge drinking, petty theft, drunk driving, abusing farm animals, and so on) shows everyone you work with that, when push comes to shove, you have poor judgment and don't know where to draw the line.

Many presidents have been elected in spite of their past indiscretions, but unless you have a team of handlers and PR types protecting and spinning your image, you should keep your unsavory past to yourself.

8. That you're job hunting. When I was a kid, I told my baseball coach I was quitting in two weeks. For the next two weeks, I found myself riding the bench. It got even worse after those two weeks when I decided to stay, and I became "the kid who doesn't even want to be here."

I was crushed, but it was my own fault; I told him my decision before it was certain. The same thing happens when you tell people that you're job hunting. Once you reveal that you're planning to leave, you suddenly become a waste of everyone's time. There's also the chance that your hunt will be unsuccessful, so it's best to wait until you've found a job before you tell anyone. Otherwise, you will end up riding the bench.

Bringing It All Together

Have you seen any of the above cause trouble for people at

work? Are there any others that you would add?

The Virtuous Woman
by Natnael Yebio

When man and woman began to live in caves a long time ago, there was no beauty in man that people should desire him or enter into an intimate relationship with him. He looked more or less like a seamless or suture less Frankenstein monster and with his rock-hard muscles and brass-like sinews, he inspired more fear and loathing than love and compassion.

In contrast, his other half, or his wife, possessed soft and shapely physique, and although she looks more a glorified chimpanzee than anything else, she inspired love and those who looked at her, desired her and clubbed her unconscious and dragged her to their caves.

The feminine virtues that women possess include softness, tenderness, daintiness, refinement, patience, intuitiveness, calmness, e.t.c which are mostly absent in men and for the acquisition of which man falls in love with woman. Man wants to fill the vacuum that lack of such creates in him. Unfortunately, these virtues, accompanied or enhanced by physical virtues such as comeliness, shapeliness, e.t.c are sometimes taken to the market for sale.

Most women, after considering their position in man-dominated world seem to have chosen the past of least resistance, mainly that of selling their feminine virtues through guile, deceit, seduction and enticement.

The moment a child discovers that it belongs to the fair sex, therefore the losing type, it evinces some changes in its behavior and the way it looks at things both living and non-living.

And it prepares itself for a lifelong challenges and confrontations by designing plans, strategies and lines of action.

"You are a girl and should cover certain parts of your body." counsels the mother.

"Comb your hair properly." shouts the big sister.

Yohanna, the girl is now seven and feels that things will not be the same for her henceforth. She is supposed to cover her mouth when she laughs, is not allowed to play football and is expected to use her nails and teeth when fighting, or else she will be labeled a Tomboy and will thus stand to lose in the race for marriage and the good family life.

Yohanna overhears people talking about other girls like her. About her beautiful sister who has now so many bachelors pursuing her, that she can't decide. Yohanna has to become beautiful like her elder sister if a lawyer or an engineer is going to marry her. She has to act in a seductive and enticing manner if she is going to snatch a rich man.

She can't help overhearing her parents talking about Rahel, the neighborhood girl, who in spite of her ungainly postures and not good looks, has managed to snatch from their daughter Girmawit the rich businessman with money to throw.

"That unscrupulous scarecrow, I will show her who I am," growls the mother.

"She is a go getter?" snarly the father.

Yohanna is now 18, but she has seen and heard enough, in fact so much to start making her beguiling plans, and outline her shrewd policies. By now Yohanna knows that in a world that is alien to her and dominated by machos, she can always survive by selling her virtues to the highest bidder.

"Where have you been all day long?" shouts mother shaking with rage.

"I went over to a friend's house for lunch and the telephone was out of order." replies Yohanna.

But deep inside, Yohanna is loath

to go to school. Many of her friends with birdbrains have made it in life simply because they knew how to seduce and snatch the rich and the young fools who get regular 'pay' from their brothers in the Diaspora. There are two ways of selling one's feminine charms. To establish a family, and to get riches and fame. The first is done by almost any girl albeit with moderation and wisdom. The second is however practiced by those with the last trace of pride and human dignity flowing in their tainted blood.

The selling of one's feminine virtues is one of the oldest businesses in the world. It is the oldest because it is the easiest. You are born with the commodities and you don't need a license to conduct your sales. You need to produce neither a financial statement nor are you required to watch stock markets. You have neither overhead expense nor can you worry much about promotional considerations. All you need is the ability to display your products at the right time and to the right buyer. The rest is taken care by nature and instinct.

Wuba Ferede is known as Eritrea's most celebrated courtesan. She lived about two hundred years ago and is said to have caused the hearts of feudal lords to skip a beat or two. They say she was so beautiful the gods and angels left paradise and came down to see her. She traveled with the rearguards in the tribal wars that raged in feudal Eritrea and kept many warlords warm and happy during cold nights and after gloomy battles.

It is strange that in a culture where chastity and continence is prized above every other human virtue, a woman like Wuba should come along and manifest the cardinal vices in order to advance her interest. The answer is simple. Wuba was a very beautiful woman. She knew that if she didn't take her feminine virtues to the market soon and wait for the highest bidder, she would remain a farmers' wife for the rest of her life. But doing the works of iniquity, she was at least able to get all she wanted in life: riches, fame and amusement.

But this is not the end of her story, for the end result of bargaining with one's noble virtues is ignominy, despair and agonized death.

It is not old soldiers only that fade away and don't die; the maxim also applies to courtesans. When Wuba died at least as all mortals must sooner or later, she was not fighting against senility only, but against derision and contempt of her society.

In our culture, the selling of one's feminine virtue for paltry and ephemeral gains is very much frowned upon.

The real woman in our culture is the virtuous woman depicted by King Solomon in the scriptures; who can find a virtuous woman? For her price is far above rubies…..She opens her mouth with wisdom… She eats not the bread of idleness… Favor is deceitful, and beauty is vain, but a woman that fears the Lord, she shall be praised.