

ESO NEW DEVELOPMENTS

The Official Grazing Capacity Map of South Africa

Dirk Pretorius

The Official Grazing Capacity Maps for South Africa was introduced in 1993 to assist with the enforcement of the Conservation of Agricultural Resources Act (CARA) (Act 43 of 1983). In practice these maps serve as a guideline for the long-term grazing capacity of veld. Unfortunately, no data exists for previous homeland and self governing areas. Large areas in the Western Cape and some protected areas were also masked out on the map (no data).

Due to the fact that these maps were never officially replaced it was decided to include the Potential Grazing Capacity Maps in the ESO Regional Data; Environment Module. (A potential and official value (**ha/LSU**) is extracted for a farm or GPS point and the official map is available as an additional document).

The Potential Grazing Capacity Maps in ESO give an **indication** of the potential grazing capacity based on a vegetation index that was derived from MODIS satellite data. Transformed rangelands were extracted from the Land Cover 2000 information and tree canopy information was derived from the Global Tree Canopy Map. Due to the diverse nature of South Africa's vegetation these maps could not be calibrated for all vegetation types. Any uncertainties regarding the actual grazing capacity of a site should be resolved by means of a proper field survey.



USING THE ESO PLANT HEALTH PROBLEM SOLVER TO ITS FULL EXTENT

Wendy Malatji

Today, one of the biggest difficulties in agriculture is the level of crop losses due to multiple problems (insects, diseases, weeds and soil deficiency) combined with increasing food demands due to population growth. This requires immediate action to develop tools and techniques that will assist in preventing crop production losses and lead to higher food production. The Problem Solver on Extension Suite Online (ESO) is such a tool.

The Plant Health Problem Solver is a practical and user friendly tool within the ESO system, which deals with health intricacies of various crops. The main objective of the tool is to enable the user as an extension officer to correctly identify a crop health problem on a farm using a logical series of images provided by the system, which will aid the user in guiding a farmer towards the appropriate control measures.

To access this information on ESO, the user should navigate to the Problem Solvers sidebar option and select the Plant Health information item with its three sub-items; Pest and disease, Storage pests, and Weeds. The Pest and disease sub-item explores all the important insects, pests and diseases in the fields on every crop and it offers high-quality visual displays and recommended control measures where applicable. Storage pests look at the problems producers face after harvest. Finally when using the newly improved Weeds Problem Solver, not only will the user be able to identify undesired plants in the field, but this tool offers information on how to prevent or eradicate

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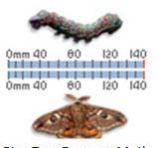
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www.newsletter.esuite.co.za

them by using the registered herbicides that are listed with the correct application times.

Identification of a "problem" on the Problem Solver is a step by step process that includes the following:

- Selection of a crop (Protea)
- Selection of the affected plant organ (leaf)
- Selection of a possible general symptom (Serrations)
- Selection of a possible causal agent (Pine Tree Emperor Moth)



The final step of the tool has a link that goes to a more detailed Crop Health page which will provide the user with more detailed information on the causal agent and suitable control measures.

The Problem Solver is developed and improved daily

by the Plant Production Core team at Manstrat, with the development team offering recurrent technical support. We hope that ESO users will hugely benefit from it as a reliable source of timeous information to assist them when facing their daily challenges.

USEFULL TIPS FOR EXTENSIONISTS

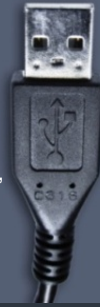
Matsunke Malefane and Michèle Cloete

Tips for facilitators to manage effective meetings

- Set ground rules.
- Framing the aim and purpose of the meeting at the start.
- Create a friendly, comfortable and open environment for the participants.
- Support openness, different perceptions and diversity.
- Encourage active participation.
- Acknowledge contributions from all members.
- Give advice only when and where needed.
- Everybody's views must be heard.
- When energy levels subside, switch to a different activity or take a break.
- When conflict arises, manage it.
- Adjourn on time.

The Extension Suite Online (ESO) Plant Production Problem Solver is an essential section of ESO as it contains the solutions to various crop health problems and aids in calculating and converting the different units applicable in agriculture. The ESO plant problem solver is easily located by clicking on the "Plant Production" main navigation tab and then by selecting a commodity such as Vegetables, Fruit, Grains, etc. After selecting a commodity the Problem Solvers can be found in the sidebar as an information option. This Problem Solver information option in the sidebar provides the user with two sub-items namely "Plant Health" and "Converters and Calculators".

"Plant Health" consists of three sub categories, "Pests and diseases", "Storage pests" and "Weeds". Each of these items functions as problem solvers and via a process of selection will guide the user towards a probable solution to a possible crop health problem.



"Converters and Calculators" also consist of three sub items, "Metric system", "Converters" and "Applications". "Metric system" functions as an introductory page and gives basic information regarding units, equivalents and correct methods of writing. "Converters" can be used to convert measurement amounts to equivalent metric values. Insert a value into one of the textboxes supplied and click on the convert button next to it to get the equivalent values for the other units. Lastly "Applications" can be used to calculate values such as mass per unit area, volume per unit area, etc. Enter two values in the first two textboxes given and click on the calculate button to receive the answers.

The ESO Plant Problem Solver provides a wide range of solutions to ensure virtuous production outcomes.

MONTHLY NATIONAL EXTENSION SUITE ONLINE USER: JUNE 2012

ESO utilisation is determined through monitoring user utilisation in the nine provinces and by attaching values to Visits, Pages Visited and Duration of Visits, a rating is calculated to establish the National ESO USER of the Month.

IMPROVED ESO USER EXPERIENCE

Thapedi Setshedi

Congratulations to **Jacob Mapheto** (Western Cape Government, Agriculture). He is a first time ESO National monthly user and therefore receives a 4 Gig flash stick, certificate and an ESO pen.

During July, we had the opportunity to ask Jacob Mapheto a few questions regarding his usage of ESO:

What is your responsibility at the department?

To provide agricultural advisory and support services to farmers, farmer organizations and other agricultural stakeholders like DAFF: Department for Rural Development and Land Reform.

How long have you been working for the department?

Eight months to date.

How often do you make use of ESO?

I'd say about eight times a month, some weeks more than other.

What do you use Extension Suite Online for the most?

Mostly the economics section and mainly for Enterprise budgets and Market prices.

What impact does ESO have on your relationship with your clients/farmers?

I'd say it has a positive impact, in that I can advise



Jacob Mapheto

my clients within a short space of time, if not on the spot, and with confidence because the data is mostly location specific.

Would you recommend ESO to your colleagues and why?

Yes I would. It's a great tool to use when venturing into unfamiliar territory, like enterprise budgeting in my case or something you weren't taught in your formal education.

In a few words, how would you describe ESO as an Extension tool?

It's a quick access gateway to agricultural expertise and data.

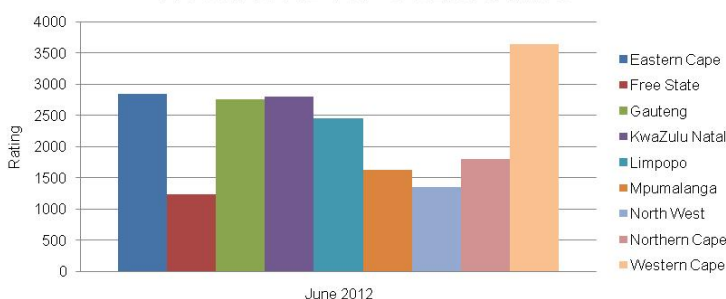
To enhance the ESO user experience, a friendly and helpful "ESO Home Page" was launched nationally at the end of May 2012 allowing users to automatically access the ESO home page when logging on.

ESO Home Page displays an array of interesting and helpful information including a **Market Price Opportunity Graph; The Crop and Breed of the Week; Hot Discussion Topics; What's New in ESO; Other Interesting Sections; Pest and Disease of the Week; The National User of the Month; and ESO Additional**, which includes technical data, the Help Centre, and Departmental Publications and Links.

Previous Knowledge Base Icons (Search and Question & Answer) have now been incorporated into the Module.

A number of interesting discussions are already in full swing on the various Discussion Forums, including relevant discussions around the "Beefing up of Extension Services". ESO users are urged to follow and participate in these discussions together with colleagues and other experts.

PROVINCIAL TOP USER RATING



NAME OF TOP USER IN EACH PROVINCE JUNE 2012

PROVINCE	NAME
Eastern Cape	Sindle Magoda
Free State	Matobela Rhulani Herold
Gauteng	Lesego Phakedi
KwaZulu Natal	Jabulani Mdluli
Limpopo	Konute Jackson
Mpumalanga	Jacoline Molalagotla
North West	Keemetswe Mosang
Northern Cape	George du Preez
Western Cape	Jacob Mapheto