



Agro-Phyto Information Collection (APIC) Task Force Report

Santa Cruz do Sul, Brazil

24 October 2017



APIC (Agro-Phyto Information Collection)

- ❖ **Collection of innovative research on Molecular Markers and Alternative Products**
- ❖ **Products not widely used in the industry, and may offer alternative options towards sustainable production.**



- ❖ **An APIC meeting was held on Sunday 22.10.17**
- ❖ **The sub-group has been rather dormant as of late**
- ❖ **Discussion centered around the effectiveness of APIC and where the group's value lay**
- ❖ **Discussion ensued on how it can be operated more positively**



APIC – Going Forward

- ❖ **A committee was formed comprising of one member from each region:**
 - **Europe – Kane Kadidiatou**
 - **China – Jingjing Jin**
 - **Africa – Susan Dimbi**
 - **South America – Elton Jacobs**
 - **North America – Colin Fisher**
 - **Asia (remaining) – Srinivas Putchala**



APIC – Going Forward

- ❖ **Having better knowledge of the players in their particular region each representative would collect related knowledge from their region**
- ❖ **This information will come to a central point**
- ❖ **A “basket of information” will be linked to each facet of interest (i.e. TSNAs, fertilisation, sucker control, Molecular Markers etc.)**



Molecular Markers

- ❖ **An update on Molecular Markers will be shared with CORESTA in the near future by Anne Jack**



Examples of the role of APIC

❖ Product Efficacy

- Every year, growers waste money on products which do not meet the claims of manufacturers.
- Supporting data is needed to advise farmers whether such products actually have benefits and are economically viable.



The Label on the product HP 400 claims it

“triggers endogenous antioxidant activity”

and that

“only one application on tobacco may substantially reduce the nitrosamine (TSNAs) concentration in the finished product”



Evaluation of the Efficacy of HP 400 (2015 & 2016)

Kentucky University investigators Anne Jack (KTRDC), Colin Fisher (P&SS), Huihua Ji (KTRDC)

conducted a study using a high converter in order to detect small differences in TSNA levels.

Result:

Using HP 400 found no statistical difference in TSNA levels in both 2015 and 2016



Concept of the product development is:

Roots and leaves can only take up and utilize nutrients that are in **solution**.

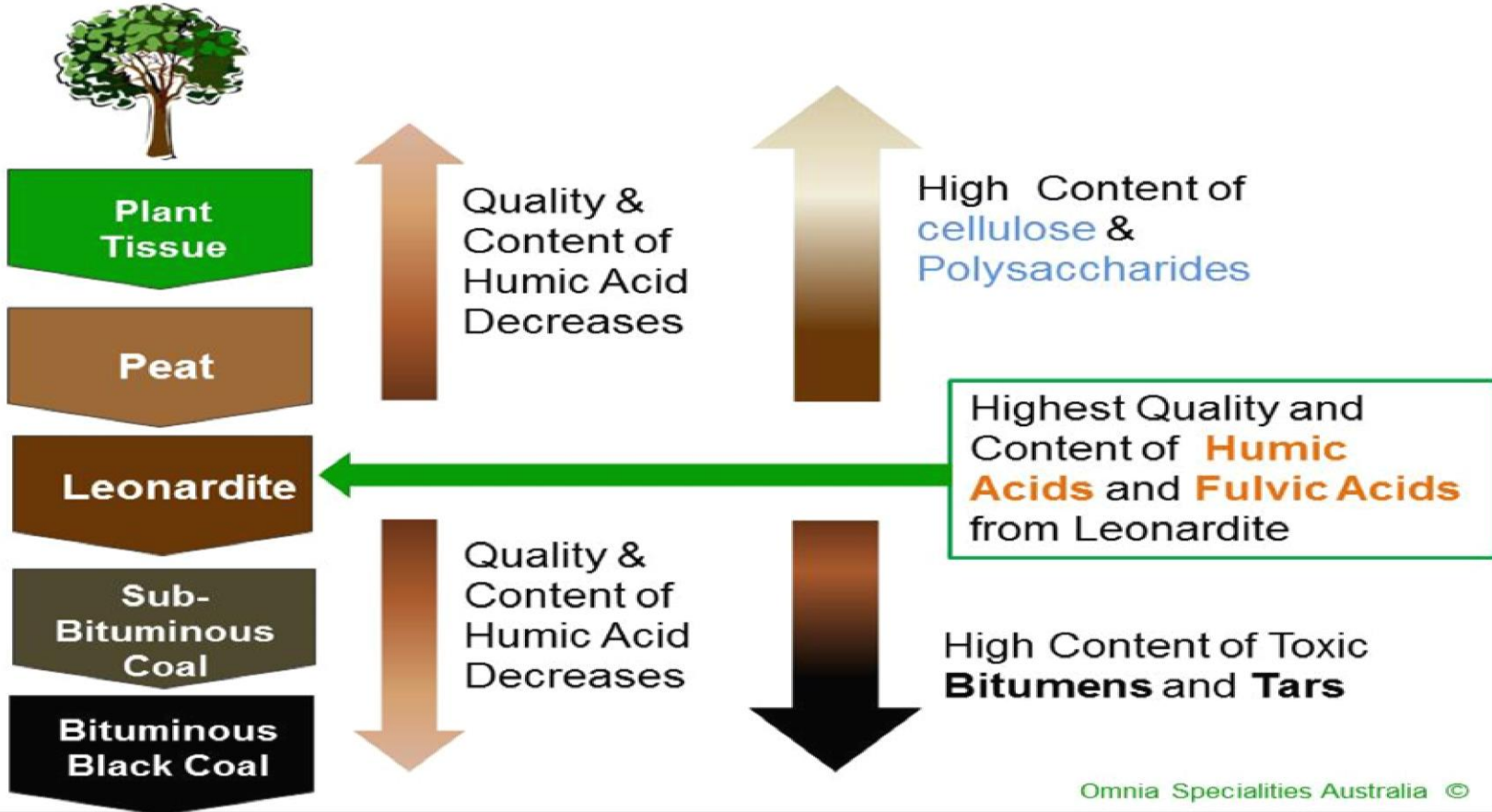


❖ Promotional examples:

- **increases plant uptake of nutrients**
- **good soil structure**
- **microbial activity**
- **improves viability**
- **rate of seed germination**
- **vigorous roots**
- **resistance to stress**
- **organic carbon**
- **retains water soluble fertilisers**
- **and releases in root zones as needed**

Sources of Humic Acids and the Quality of the derived Humic Acids

100-Million Year Coalification Process





❖ Humates are not a sustainable product, so how does it apply to Sustainability? Claims are:

1. Less fertilizer usage – interim solution while alternate options are found
2. Higher Yields – Less natural resources used (water/land)
3. Soil Health
4. Viability





There is one question APIC would like to answer for each of these products:

**DO THESE PRODUCTS WORK
COMMERCIALY?**