PROTECTION OF MAIZE GRAINS FROM GRAIN WEEVILS IN FARMERS GRANARIES IN RURAL AREAS OF KENYA BY IMPROVED TRADITIONAL PRACTICES

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SUMMARY

Most of the sub-saharan countries that include Kenya, experience food shortages from time as a result of drought and other factors. In cases of plentiful supply losses up to 50% are incurred during storage through grain weevils. Protection chemicals, that be imported at great expenses are beyond the reach of the majority of the rural folks. These hard chemicals tend to have side effects.

Our efforts at Moi University are at improving the traditional practices of the rural farmers. Our presentation will be illustrated with examples from natural products.

Table 1: mortality results from treatment of adult **Sitiphilus Zcamis** with a mixture of **Pyrethrum and Tagetes minute.**

Mixture of plant Extracts		Day			
		1st	2nd	3rd	4th
3% Targets Extracts 1% Pyrethrum + 3÷ Ratio 3:1	% age Mortality	40	100	100	100

Table 2: Repellence Tests of Various Plant Extracts to S. Zeamais.

Plants Extract	No Repeated	No not Repeated
3% Melio azederach	10	10
3% Tagetes Minuta	14	6
1% Pyrethrum green oil	18	2
3% Datura stramonium	4	6

N/B:

1. Pyrethrins are well know naturally occurring pesticides and are grown in Kenya on a commercial scale. However they are very expensive, hence they need to combine with other pesticides traditionally used by rural folks.

2. Pyrethrins have powerful repellent factor (s) that remains long after the pyrethrins have degraded

We have also demonstrated that extractives from Agauria Salicifolia are the most active against mustard beetles Bioassay guided isolation and purification of the extracts led to the isolation of two highly insecticidal compounds with LD_{50} 0.037 and 0.168 / insect respectively.

REFERENCES

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