EVALUATION OF GLOW LIQVITONIC IN FC TOBACCO

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RESEARCH DEPARTMANT

EVALUATION OF GLOW LIQVITONIC IN FC TOBACCO – NORTHERN LIGHT SOILS

Objective: - Evaluation of glow liqvitonic in FC Tobacco in Northern light Soils

Date of Plantation: - 11th November, 2021

Spacing: - 110X 60 cm

Treatments: -

T_1- Liqvitonic + 0% RDF (Recommended Dose of Fertilizer)

T_2 - Liqvitonic + 50 % RDF

T_3 – Liqvitonic + 75 % RDF

T_4 – Liqvitonic + 100 % RDF

T_5 – 100 % RDF

Recommended Dose of Fertilizer: - 120:45:150 – $N:P_2O_5:K_2O$ kg/ha

(For T_1,T_2,T_3 and T_4 – 3 times drenching (at 1st,2nd and 3rd WAP and 1 Foliar Spray of Glow Liqvitonic at 30 DAP)

Plant Population: - 96 plants/ plot

Inter cultivations: - 6 times

Number of irrigations: - 10

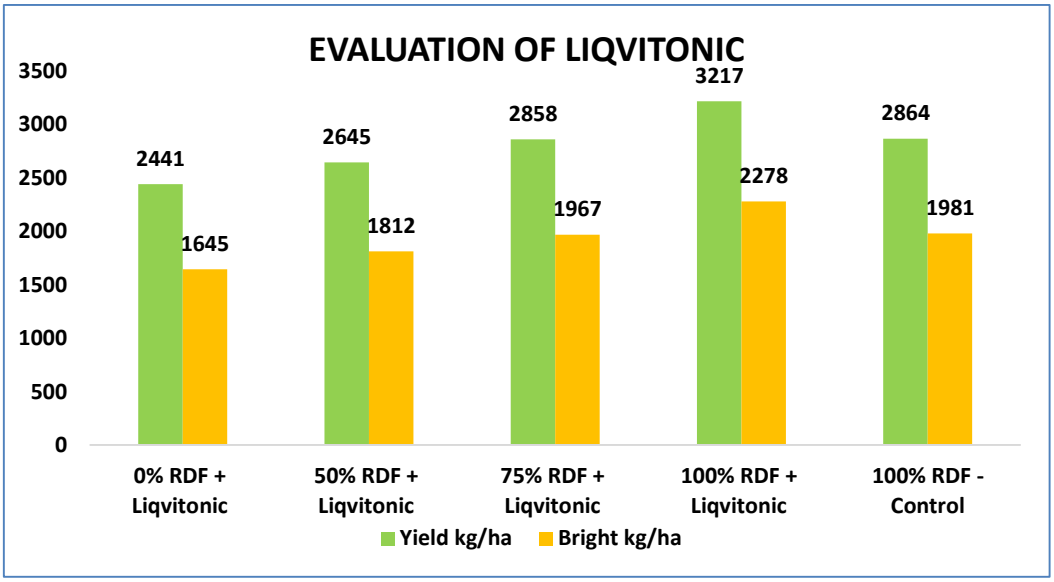
Observations

- ✓ Initially the crop was good in all the treatments, as the crop progresses the treatments - 0% RDF+ Liqvitonic and 50% RDF+ Liqvitonic showed pale green colour of leaf with thin body.
- ✓ 75% RDF + Liqvitonic and 100% RDF + Liqvitonic applied plots were healthy and with good growth, when compared to other treatments.

Productivity and Grade out Turns

Treatment	Cured leaf Yield (kg/ha)	% Over Control	Bright (kg/ha)	Bright %	Medium (kg/ha)	Low (kg/ha)	Greens (kg/ha)	PL/Scrap (kg/ha)
0% RDF + Liqvitonic	2441	-15	1645	67	395	247	0	155
50% RDF + Liqvitonic	2645	-8	1812	68	480	183	0	170
75% RDF + Liqvitonic	2858	0	1967	69	522	208	0	162
100% RDF + Liqvitonic	3217	12	2278	71	527	234	0	178
100% RDF (Control)	2864	0	1981	69	534	254	0	95

The treatment with 100% RDF along with Liqvitonic recorded higher productivity 3217 kg/ha (12%) and bright grade returns (71%) when compared to control 2864 kg/ha (100% RDF). The treatment of 75% RDF in combination with Liqvitonic is similar to control (100% RDF fertilizer) in terms of productivity and quality.



Chemistry

Treatment	LUGS			LEAF		
	Nicotine (%)	Total Sugars (%)	Chloride (%)	Nicotine (%)	Total Sugars (%)	Chloride (%)
0% RDF + Liquitonic	0.91	14.7	0.38	2.19	16.8	0.29
50% RDF + Liquitonic	1.09	13.1	0.26	2.46	19.6	0.28
75% RDF + Liquitonic	1.18	11.2	0.24	2.69	10.2	0.30
100% RDF + Liquitonic	1.62	12.8	0.28	2.62	16.4	0.23
100% RDF (Control)	2.62	14.8	0.26	3.64	11.3	0.45

The nicotine was ranged from 0.91% to 2.62% and total sugars ranged from 11.2% to 14.8% in lug position. While in leaf position, nicotine ranged from 2.19% to 3.64% and total sugars ranged from 11.3% to 19.6%. There is no significant shift in the chemistry of the lamina samples with application of different levels of RDF fertilizers in combination with Liqvitonic except 100 % RDF, which recorded higher values of nicotine (2.62 & 3.64%) at both postions.

CROP GALLERY:

Preparation Liqvitonic for drenching

Pouring Liqvitonic

Preparation Liqvitonic for spraying

Spraying of Liqvitonic

Only Liqvitonic applied plot 40 DAP

RDF applied plot 40 DAP

Only Liqvitonic applied plot 70 DAP

Only Liqvitonic Vs. 50 % RDF + Liqvitonic @70 DAP

50 % RDF + Liqvitonic Vs. 75 % RDF + Liqvitonic @ 70 DAP

75 % RDF + Liqvitonic Vs. 100 % RDF + Liqvitonic @ 70 DAP

100% RDF + Liqvitonic Vs. Control (RDF)