

EEE BRANCH REVIEW

DATE: IN _____ OUT _____ IN _____ OUT _____ IN 3/5/76 OUT 4/20/76
FISH & WILDLIFE ENVIRONMENTAL CHEMISTRY EFFICACY

FILE OR REG. NO. _____

PETITION OR EXP. PERMIT NO. 9538-EUP 9538-L

DATE DIV. RECEIVED 2-17-76

DATE OF SUBMISSION 1-26-76

DATE SUBMISSION ACCEPTED _____

TYPE PRODUCT(S): I, D, (H) F, N, R, S Plant Growth Regulator

PRODUCT MGR. NO. Donald Stubbs

PRODUCT NAME(S) FLO-MO 810 Tobacco Sucker Control Agent

COMPANY NAME Sellers Chem. Corp.

SUBMISSION PURPOSE Application for EUP on tobacco

CHEMICAL & FORMULATION Fatty Alcohols (C₆-0.42%, C₈-38.6%, C₁₀-45.9%) (85%)
(6.04 lb. ai/gallon)

REV 03 1975

(1)

200.0 Introduction

200.2 Background information:

Identical FLO-MO 810 effectiveness data were submitted in support of registration or an experimental use permit. These data will not support registration, therefore, a total of 152 gallons FLO-MO 810 are requested (918 lbs. ai) for experimental use on 76 acres of flue-cured and burley tobacco in Georgia, North Carolina and Kentucky.

200.2.1 Factors affecting amount/type of data required

1. Types of tobacco on which FLO-MO 810 will be used: burley, flue-cured, dark, Maryland and cigar.
2. Tobacco varieties on which FLO-MO 810 will be used.
3. Application rates: 1 1/2-2 gallons in 50 gal. water.
4. Method of application: hand spraying vs. use of power equipment.
5. Number of applications: Repeat application 5-7 days first application is recommended.
6. Tobacco states in which FLO-MO 810 will be used.
7. Repeat application if first application is washed off by unexpected rainfall.

201.0 Data summary

201.1.1 Brief description of tests.

Efficacy, phytotoxicity and yield data submitted are unacceptable in support of registration mostly due to application and procedural errors. Preliminary data were restricted to the Speight 628, Coker 347 and Coker 411 varieties of the flue-cured tobacco in North Carolina only.

201.1.2 Data summaries:

Refer to EEEB files for company data summaries.

202.0 Conclusions

202.2 Claims not supported by the data submitted

1. Efficacy data submitted will not support use of 1 3/4 gal./A FLO-MO 810 in 50 gal. water on flue-cured, burley, Maryland, cigar or dark tobaccos in North Carolina.
2. Crop injury and yield data submitted will not support use of 2 gal./A FLO-MO-810 on flue-cured, burley, Maryland, cigar or dark tobaccos in North Carolina.

202.3 Program evaluation - Additional data required to support claims and achieve registration

The FLO-MO 810 should be included

The 1976 experimental program is not adequate in scope or design to support full registration. Prior to achieving registration, submit data evaluating the following factors for efficacy using 1 3/4 gal./A FLO-MO 810; and crop injury, leaf quality and yield using 2 gal./A FLO-MO 810:

1. All types of tobacco on which FLO-MO 810 will be used - flue-cured, burley, dark, Maryland and cigar *should be included.*
2. Representatives tobacco varieties for each state in which FLO-MO 810 will be used *should be included.*
3. Method of application: hand spraying vs. use of commercial power equipment *should be addressed.*
4. Number of applications: Data must evaluate a secondary application of FLO-MO 810 (using 1 3/4 gal/A for efficacy and 2.0 gal./A for crop injury and yield) applied 5-7 days following an initial treatment at the same rate. Factors 1-3 above must be included.
5. Repeat application: Data must evaluate a repeat application using minimum and maximum recommended rates re-applied after the first application is washed off by rainfall. Factors 1-4 above must be included.

203.0 Label revisions required prior to issuance of 1976 EUP

1. Under "Directions for Use" first paragraph, delete "Dark" tobacco or submit recommended rates of application and necessary "Directions for Use".
2. Delete from the experimental label the use of FLO-MO 810 on Maryland tobacco, as no tests are proposed in the state of Maryland.
3. Delete from the experimental label the use of FLO-MO 810 on cigar tobacco, as no tests are proposed in the states of Pennsylvania and Wisconsin.

204.0 Label revisions required prior to registration

1. Under "Directions for Use" first paragraph, delete the statement "FLO-MO 810 Sucker can be used alone or followed by a systemic sucker control agent in a dual treatment program." or list the recommended product and include on the label recommended application rates, directions for use, advantages obtained, and any precautionary statements required. All claims must be supported by efficacy, crop injury and yield data prior to registration.

2. Under "Number of Applications" delete the sentence "Some growers favor a dual treatment using FLO-MO 810 Sucker first (at late button stage) followed 1 to 2 weeks later with a systemic sucker control agent (maleic hydrazide) used in accordance with the manufacturers instructions." If you are recommending a sequential maleic hydrazide treatment, so indicate, and provide the necessary label directions supported by data as indicated in 204.1 above. Maleic hydrazide is presently registered for use by itself with no label recommendation for use as a sequential treatment.
3. Label directions for hand sprayers must read 4-5 fluid ounces per gallon...
4. Label must indicate the conditions under which the lower application rate should be used.

205.0

It is suggested that Dr. E. B. Whitty, chairman of the Regional Tobacco Growth Regulator Committee, be contacted concerning entrance into the committee's testing program and the types of data required by the committee at 303 Newell Hall, Dept. of Agronomy, University of Florida, Gainesville, Florida 32601.

Comment

It is not necessary that all data required in support of registration be generated during this experimental year. Extensions of this EUP may be granted in future years so that all necessary data requirements may be addressed prior to submission for registration. The 1976 EUP label is acceptable pending the necessary label revisions (203.0).

Richard Petrie *WSW*
Efficacy and Ecological Effects Branch *JP*

*Fatty alcohols (C₆-0.42%, C₈-38.68%, C₁₀-45.90%) (85%)

EUP No.: 9538-EUP

USE	TOLERANCE P.P.M.	RATE		APPLICATION	LIMITATIONS AND REMARKS
		ACTUAL LBS/ACRE	FORMULATION		
BURLEY, FLUE-CURED, DARK, MARYLAND and CIGAR TOBACCO Tobacco sucker control agent For use in N. Carolina only.		10.57-12.08	1 3/4-2.0 gal. in 50 water/A or 4-5 cz/gal. of water	Appl. rates for: FLUE CURED, BURLEY, MARYLAND and CIGAR TOBACCOS Power sprayer application rates Hand sprayer application rates. Will treat 190 plants. Application Time: Top tobacco plants in late button to early flower stage and remove any suckers over one inch long. Emulsion must contact suckers, and plants must be straight up. Spray within 2 days after topping and removal of suckers. Apply any time during day until leaves begin to close in the evening. If rainfall occurs one hour or more after application, reapplication should not be necessary. Method of Application: Hand spraying - Use coarse spray directed downward at the top of the stalk from 6-8" above the top of the leaves. Not more than 20 psi is required.	Use in North Carolina only Emulsion must contact the sucker to be effective. Avoid application after dew or when plants have recovered from wilt. Avoid application under bright sunlight temp. above 90°F Do not apply if winds are high enough to turn top leaves as injury may result to underside of leaves Do not apply during rains or when plant is wet Add water to F10-Mo 810 rather than F10-Mo 810 to water. Diluted emulsion may separate if allowed to stand. Mix emulsion well immediately prior to use.

*F10-Mo 810 Tobacco Sucker
Control Agent-Growth Regula-
tor.
Sellers Chem. Corp.
(6.04 lbs. ai/gallon)

FORMULATION: FLO-MO 810 (Cont)

USE	TOLERANCE P.P.M.	RATE		APPLICATION	LIMITATIONS AND REMARKS
		ACTUAL LBS/ACRE	FORMULATION		
				<p>Power equipment: Use 3 nozzles per row. Direct center nozzle over the row and side nozzle 9" on either side directed at or slightly above the top of stalk. Use coarse spray 12"-16" above top of tobacco plant. Do not exceed 25 psi boom pressure (at 20 lbs. psi w/recommended nozzles at speed of 2 1/2-3 MPH 50 gallons will be applied/A)</p> <p><u>NUMBER OF APPLICATIONS</u></p> <p>A second treatment 5-7 days after initial treatment may be made if secondary sucker growth is vigorous.</p>	<p>Do not mix FLO-MO 810 w/other chemicals or apply to plants recently treated with other chemicals</p> <p>Use clean spray equipment.</p> <p>Delay applications to BURLEY TOBACCO during prolonged periods of high heat or humidity or if hollow stalk or stem rot diseases are present.</p>

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