

US EPA ARCHIVE DOCUMENT

CASE 080023

PARHTHALENE ACETIC ACID

PP 100 11/26/79

CHEM 050002

1-naphthaleneacetic acid

BRANCH EEB DISC 20 TOPIC 201028007

FORMULATION 00 - ACTIVE INGREDIENT

FICHE/MASTER ID 05010399

CONTENT CAT 03

Coats, G.E. (1966) Growth Regulator Effects on Cottonseed Treatment. State College, Miss.: Mississippi State University, Agricultural Experiment Station. (Mississippi Agricultural Experiment Station information sheet 935)

SUBST. CLASS = 3.

OTHER SUBJECT DESCRIPTORS

PRIM: EFF -10-35

DIRECT RV\* TIME = 0.5 (MH) START-DATE 24 OCT 1980 END DATE 24 OCT 1980

REVIEWED BY: Robert W. Holst, Ph.D.  
 TITLE: Plant Physiologist  
 ORG: Sect. 1, Ecol. Eff. Br. HED OPP  
 LOC/TEL: Rm 807 CM2 557-0320

SIGNATURE:



DATE: 24 OCT 1980

APPROVED BY:

TITLE:

ORG:

LOC/TEL:

SIGNATURE:

DATE:



Chemical: 1-Naphthaleneacetic acid

Citation: Coats, G. E. (1966) Growth Regulator Effects on Cottonseed Treatment. State College, Miss.: Mississippi State University, Agricultural Experiment Station. (Mississippi Agricultural Experiment Station information sheet 935)

Reviewer: Robert W. Holst, Ph.D., Plant Physiologist  
Hazard Evaluation Division/Ecological Effects Branch

Validation Date: 10/24/80

Test Title: Cotton - Germination & Growth

Conclusion: At 0.1 ppm or greater germination and growth are delayed or inhibited.

Validation: This study is scientifically sound.

**Materials and Methods:** Cotton (var Stoneville 213) seeds were soaked with NAA .0001 to 100 ppm for 24 hrs. Nine other varieties were tested. Plants were grown to maturity.

**Results:** Concentration greater than 0.1 ppm delayed or inhibited germination. At 100 ppm germination was delayed 10-14 days, the primary root became enlarged, the mature roots were branched as compared to a main taproot for the controls, and the plants were 25% taller. However there was no detrimental effect on yield/plant.