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***N*-Thiophenylethyl-2,2-dichloro-1-cyclopropanecarboxamides: modification of the amide part of carpropamid and examination of fungicidal activity**

[Shinzo Kagabu](#)¹⁾, [Maiko Shimizu](#)¹⁾, [Masaru Mori](#)²⁾, [Yoshio Kurahashi](#)³⁾ and [Isamu Yamaguchi](#)³⁾

1) Department of Chemistry, Faculty of Education, Gifu University

2) Research Center, Kureha Corporation

3) Laboratory for Remediation Research Science Center, Riken

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Abstract:

The synthetic route for a halo-substituted thiophenylethyl variant of blasticide carpropamid is described. First, halo-substituted acetylthiophene was homologated to thiophenylacetic acid using $\text{Pb}(\text{OAc})_4$ and BF_3OEt_2 , followed by reduction to $\text{CH}_2\text{CH}_2\text{OH}$ with NaBH_4/I_2 or $\text{BH}_3\text{Me}_2\text{S}$, and then to the azide *via* the tosylate. The azide was transformed to the amine using triphenylphosphine, which was then allowed to react with the corresponding acyl chloride to yield the final amide product. Fungicidal tests of 50 related products for gray mold and downy mildew on cucumber, and leaf rust and powdery mildew on wheat were conducted in 500 mg/l on pot. Many compounds showed efficacy to control these plant diseases. It should be noted that several blasticide-oriented compounds displayed high control effectiveness on downy mildew.

Keywords:

[carpropamid](#), [entry to \$\text{ArCH}_2\text{CO}_2\text{H}\$](#) , [thiophenylethylamine](#), [fungicidal activity](#), [downy mildew](#)

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