

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Eastern Pine and Meadow Vole Symposia

Wildlife Damage Management, Internet Center  
for

---

March 1977

## DEVELOPMENT OF PP581 RODENTICIDE BY ICI-UNITED STATES, INC.

Dale E. Kaukeinen

*ICI-United States, Inc., Goldsboro, NC*

Follow this and additional works at: <https://digitalcommons.unl.edu/voles>



Part of the [Environmental Health and Protection Commons](#)

---

Kaukeinen, Dale E., "DEVELOPMENT OF PP581 RODENTICIDE BY ICI-UNITED STATES, INC." (1977).  
*Eastern Pine and Meadow Vole Symposia*. 120.  
<https://digitalcommons.unl.edu/voles/120>

This Article is brought to you for free and open access by the Wildlife Damage Management, Internet Center for at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Eastern Pine and Meadow Vole Symposia by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

## DEVELOPMENT OF PP581 RODENTICIDE BY ICI-UNITED STATES, INC.

Dale E. Kaukeinen, Technical Representative  
ICI-United States, Inc., P.O. Box 208, Goldsboro, N.C. 27530

## INTRODUCTION TO ICI

The ICI group comprises the parent company, Imperial Chemical Industries Limited, and some 400 subsidiaries including ICI United States, Inc. World headquarters are in London, and U.S. headquarters are in Wilmington, Delaware. Products of ICI United States serve almost every industry and include textiles, plastics, dyestuffs, pharmaceuticals, agricultural chemicals, and aerospace components.

The Agricultural Chemicals Division of ICI-US was formed in 1970 and is closely tied with Plant Protection Division (PPD) in England. PPD has world-wide responsibility for research, development and marketing of agricultural crop protection chemicals including herbicides, insecticides, fungicides, nematocides, plant growth regulators, and rodenticides. Past achievements have included 2,4-D, Paraquat, Diquat, and BHC, among others. Experimental compounds from the U.K. are evaluated and developed for the U.S. by the Biological Research Center at Goldsboro, N.C. Facilities on this 250 acre site include fully-equipped laboratories for the formulation, research, development, and residue departments. Field trials can be carried out on the associated farm and at research farms in California, Florida, and Illinois; in addition to those arranged through universities and other groups and those conducted by regional ICI representatives.

## THE ICI RODENTICIDES PROGRAM

Rodenticides are a new venture for ICI. Rights were secured in 1975 to a series of novel anticoagulants synthesized in England. One of these compounds, difenacoum (RATAK<sup>R</sup>) was chosen for initial development by PPD for most non-U.S. markets. In the States, ICI chose a related compound known as PP581.

## CHARACTERISTICS OF PP581

Chemical Name: 3-[3-(4'-Bromo[1,1'-biphenyl]-4-yl)-1,2,3,4-tetrahydro-1-naphthalenyl]-4-hydroxy-2H-1-benzopyran-2-one.

Common Chemical Name: Brofenacoum (Under Negotiation)

Code Numbers: PP581, WBA8119

Appearance: an off white powder

Empirical Formula: C<sub>31</sub>H<sub>23</sub>O<sub>3</sub>Br

Melting Point: 228-230°C

Solubility: Soluble in benzene and chloroform. Moderately soluble in acetone, ethanol, ethyl acetate, glycerol and polyethylene glycol.

Insoluble in water and petroleum ether

Stability: Stable as a solid under normal storage

Structural Formula:

