



United States  
Department of  
Agriculture

Agricultural  
Research  
Service

Miscellaneous  
Publication  
Number 1507

# Always Something New

## A Cavalcade of Scientific Discovery

Highlights of  
50 years of  
crop utilization  
research con-  
ducted at four  
regional labo-  
ratories of the  
United States  
Department of  
Agriculture

United States  
Department of  
Agriculture

Agricultural  
Research  
Service

Miscellaneous  
Publication  
Number 1507

# Always Something New

## A Cavalcade of Scientific Discovery

Hubert W. Kelley

Highlights of  
50 years of  
crop utilization  
research con-  
ducted at four  
regional labo-  
ratories of the  
United States  
Department of  
Agriculture

---

Hubert W. Kelley: director (retired), Information Staff,  
Agricultural Research Service, U.S. Department of Agriculture

Commercial companies are mentioned in this publication solely to provide specific information. Mention of a company does not constitute a guarantee or warranty of its products by the U.S. Department of Agriculture or an endorsement by the Department over products of other companies not mentioned.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (202) 720-5881 (voice) or (202) 720-7808 (TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C., 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

Copies of ***Always Something New*** are available from an ARS regional research center convenient to you.

USDA-ARS Eastern Regional Research Center  
Office of the Director  
600 East Mermaid La.  
Philadelphia, PA 19118

USDA-ARS National Center for Agricultural  
Utilization Research  
Office of the Director  
1815 N. University St.  
Peoria, IL 61604

USDA-ARS Western Regional Research Center  
Office of the Director  
800 Buchanan St.  
Albany, CA 94710

USDA-ARS Southern Regional Research Center  
Office of the Director  
P.O. Box 19687, Rm. 2004  
New Orleans, LA 70179

November 1993

# Contents

- v Introduction
- 1 Gambling on Science
- 5 Penicillin and the War Years
- 9 Midstream Changes and Corrections
- 11 Frozen Foods
- 15 Juice
- 17 Flavors and Aromas
- 19 Processing Fruits and Vegetables
- 24 White Potatoes
- 27 Supercritical Extraction
- 28 Waste Management
- 32 The Scientists
- 35 The Tools of Research
- 38 Technology Transfer
- 41 Naval Stores
- 42 Cotton Processing Machinery
- 46 Cotton Products: First 30 years
- 50 Cotton Products: Last 20 Years
- 52 Wool and Mohair
- 54 Leather and Hides
- 58 Milk & Dairy Products
- 61 Whey
- 63 Sugar and Sweeteners
- 65 Dextran, Xanthan Gum, & Levan
- 67 Maple Syrup
- 67 Feeds, Forage, and Fodder
- 70 Alfalfa
- 72 Toxic Weeds
- 74 Eggs and Poultry
- 75 Meat and Meat Products
- 78 Catfish
- 79 Animal Fats
- 83 Cottonseed Oil and Meal
- 85 Soybean Oil
- 89 Vegetable Oils in Industry
- 92 New Oilseed Crops
- 94 Domestic Rubber
- 97 Food Safety
- 104 Human Health and Medicine
- 107 Fiber and Cholesterol
- 109 Wheat, Flour, and Bread
- 113 Corn
- 114 Rice
- 115 Grain Sorghum
- 116 Food for Peace
- 118 Fuels From Agriculture
- 120 Corn and Wheat Starch
- 125 Proteins in Milk, Grains, and Oilseeds
- 131 Peanuts
- 132 U.S. Crops in Asian Foods
- 134 Microorganisms
- 136 Crop Pest Control
- 140 Computers for Research
- 142 Basic Research
- 145 Cotton Research Today . . . and Tomorrow
- 147 Focus on the Future

## Name Changes

During the last 50 years, the regional laboratories have operated under several different names, while performing the same functions and remaining in the same buildings in New Orleans, Louisiana; Albany, California; Peoria, Illinois; and Wyndmoor, Pennsylvania. Since 1979, each has been known as a regional research center, and for purposes of clarity and consistency, this is the name used most frequently in this book to identify each of the four research facilities. To avoid monotony and redundancy, the Western Regional Research Center, for example, is also referred to by its initials (WRRC), or as the Western center, or as the Western or Albany lab or laboratory. As 1990 ended, the Northern Regional Research Center in Peoria was once again renamed by Congress. While it is identified in this book by its more familiar name or the initials NRRC, it will be known in the future as the National Center for Agricultural Utilization Research (NCAUR). All four centers, together with a fifth and newer center in Athens, Georgia, continue to be a part of the Agricultural Research Service, the principal scientific research agency of the U.S. Department of Agriculture.

*The inside and outside of USDA's four regional offices are much like that of the Southern Regional Laboratory at New Orleans pictured here.*

