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December 1962

## EDIBLE SOYBEAN PROTEIN PRODUCTS

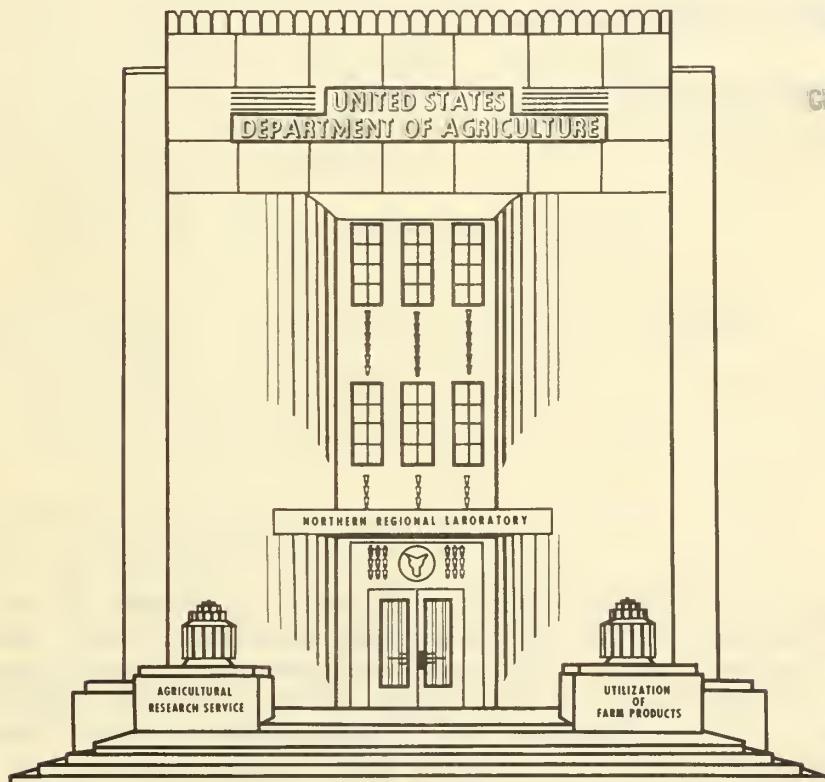
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### A List of Publications and Patents, 1936-1961 Northern Regional Research Laboratory

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This list of publications and patents represents 25 years of research work on edible soybean protein products and related technology. It supersedes previous lists issued as AIC-184, Suppl. 1-6; AIC-228, Suppl. 1-6; and ARS-71-5, Suppl. 1-7. References are listed chronologically, except those pertaining to subgroups under a main heading are placed together.

Northern Utilization Research and Development Division  
1815 North University Street  
Peoria, Illinois 61604

PUBLICATIONS ON EDIBLE SOYBEAN PROTEIN PRODUCTS

1936-1961

[Publications marked (\*) are not available for distribution.  
When requesting specific reprints, please order by number.]

Foods

73 \* ALCOHOL EXTRACTION IMPROVES SOYA FLOUR FLAVOR AND COLOR.  
A. C. Beckel and A. K. Smith.  
Food Ind. 16(8): 616, 664. August 1944.

105 \* DEBITTERING SOYBEANS, LIST OF PATENTS FOR REMOVING THE BITTER TASTE FROM SOYBEANS.  
A. K. Smith.  
Soybean Dig. 5(7): 25-26, 28. May 1945.  
AIC-73. March 1945. 9 pp. [Processed]

797 INVESTIGATIONS ON THE BITTER AND BEANY COMPONENTS OF SOYBEANS.  
H. M. Teeter, L. E. Gast, E. W. Bell, W. J. Schneider, and J. C. Cowan.  
J. Am. Oil Chemists' Soc. 32(7): 390-397. July 1955.

1292 BLAND UNDENATURED SOYBEAN FLAKES BY ALCOHOL WASHING AND FLASH DESOLVENTIZING.  
G. C. Mustakas, L. D. Kirk, and E. L. Griffin, Jr.  
J. Am. Oil Chemists' Soc. 38(9): 473-478. September 1961.

1293 THE DETERMINATION OF RESIDUAL ALCOHOL IN DEFATTED ALCOHOL WASHED SOYBEAN FLAKES.  
L. T. Black, L. D. Kirk, and G. C. Mustakas.  
J. Am. Oil Chemists' Soc. 38(9): 483-485. September 1961.

283 \* HYDROLYTIC TREATMENT OF SOYBEAN PROTEIN WITH PAPAIN.  
Vernon L. Johnsen and Allan K. Smith.  
Cereal Chem. 25(2): 77-86. March 1948.

316 \* FOOD USES FOR SOYBEAN PROTEIN.  
A. K. Smith.  
AIC-197. July 1948. 4 pp. [Processed]

405 A NEW SOYBEAN PRODUCT...GELSOY.  
A. C. Beckel, P. A. Belter, and A. K. Smith.  
Soybean Dig. 10(1): 17-18, 40. November 1949.

73-C USES OF GELSOY IN PREPARED FOOD PRODUCTS.  
Elmer F. Glabe, Pauline F. Goldman, Perry W. Anderson,  
Lewis A. Finn, Food Technology Inc., Chicago, Ill.;  
and Allan K. Smith.  
Food Technol. 10(1): 51-56. January 1956.

1290 SOYBEAN PROTEIN PRODUCTS. INFORMATION ON FOAMS AND  
THERMOREVERSIBLE GELS.  
[A. C. Eldridge]  
CA-N-18. October 1961. 3 pp. [Processed]

938 \* VEGETABLE PROTEIN ISOLATES.  
Allan K. Smith.  
In Processed Plant Protein Foodstuffs.  
A. M. Altshul, ed., pp. 249-276.  
New York. 1958.

170 \* SOYBEAN OR VEGETABLE MILK. A RÉSUMÉ AND BIBLIOGRAPHY.  
A. K. Smith and A. C. Beckel.  
Chem. Eng. News 24(1): 54-56. January 10, 1946.  
Soybean Dig. 6(7): 18, 20-23. May 1946.  
AIC-113. February 1946. 14 pp. [Processed]

1198 SOYBEAN MILK.  
[A. K. Smith]  
CA-N-13. January 1961. 4 pp. [Processed]

1258 FOOD USES AND PROPERTIES OF SOYBEAN PROTEIN.  
I. FOOD USES.  
Allan K. Smith and Walter J. Wolf.  
Food Technol. 15(5): 4-6, 8, 10. May 1961.

1257 FOOD USES AND PROPERTIES OF SOYBEAN PROTEIN.  
II. PHYSICAL AND CHEMICAL PROPERTIES OF  
SOYBEAN PROTEIN.  
Walter J. Wolf and Allan K. Smith.  
Food Technol. 15(5): 12-13, 16, 18, 21, 23, 26, 28, 31,  
33. May 1961.

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<sup>1</sup> Report of research work done by an outside agency under contract with the U.S. Department of Agriculture and supervised by the Northern Division.

Baking and Bakery Products

637 SOY-FLOUR BREAD WINS ITS PLACE. TESTS SHOW BEST AMOUNT FOR QUALITY LOAVES.  
C. W. Ofelt, A. K. Smith, C. D. Evans, and H. A. Moser.  
Food Eng. 24(12): 145-149. December 1952.

690 CRUMB SOFTNESS FROM SOY FRACTIONS.  
C. W. Ofelt, Allan K. Smith, and Paul A. Belter.  
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705 BAKING BEHAVIOR AND OXIDATION REQUIREMENTS OF SOY FLOUR.  
I. COMMERCIAL FULL-FAT SOY FLOURS.  
C. W. Ofelt, A. K. Smith, and Robert E. Derges.  
Cereal Chem. 31(1): 15-22. January 1954.

706 BAKING BEHAVIOR AND OXIDATION REQUIREMENTS OF SOY FLOUR.  
II. COMMERCIAL DEFATTED SOY FLOURS.  
C. W. Ofelt, Allan K. Smith, and James M. Mills.  
Cereal Chem. 31(1): 23-28. January 1954.

761 EFFECT OF SOY FLOUR ON AMYLOGRAMS.  
C. W. Ofelt, A. K. Smith, and James M. Mills.  
Cereal Chem. 32(1): 48-52. January 1955.

792 IMPORTANCE OF OXIDATION ON THE USE OF SOY FLOUR WITH HIGH-EXTRACTION WHEAT FLOURS.  
C. W. Ofelt and Allan K. Smith.  
Trans. Am. Assoc. Cereal Chemists 13(2): 122-129. June 1955.

951 EFFECT ON CRUMB FIRMNESS. I. MONO- AND DIGLYCERIDES.  
C. W. Ofelt, Majel M. MacMasters, Earl B. Lancaster, and F. R. Senti.  
Cereal Chem. 35(2): 137-141. March 1958.

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C. W. Ofelt, C. L. Mehltretter, Majel M. MacMasters, F. H. Otey, and F. R. Senti.  
Cereal Chem. 35(2): 142-145. March 1958.

990 PREPARATION OF 3-STEAROYL-D-GLUCOSE--A BREAD-SOFTENING AGENT.  
F. H. Otey and C. L. Mehltretter.  
J. Am. Oil Chemists' Soc. 35(9): 455-457. September 1958.

1256 FLAVOR OF BREAD AND PASTRY UPON ADDITION OF MALTOL, ISOMALTOL, AND GALACTOSYLYSOMALTOL.  
J. E. Hodge and Helen A. Moser.  
Cereal Chem. 38(3): 221-228. May 1961.

Foreign, Fermented Foods

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Lewis B. Lockwood.

Soybean Dig. 7(12): 10-11. October 1947.

533 FERMENTED SOY FOODS AND SAUCE.

Lewis B. Lockwood and Allan K. Smith.

Yearbook Agr., U.S. Dept. Agr.: 357-361. 1950-1951.

359 \* ORIENTAL USES OF SOYBEANS AS FOOD WITH SPECIAL ATTENTION TO FARMING PRACTICES. I. CHINA.

Allan K. Smith.

Soybean Dig. 9(4): 15-17. February 1949.

361 \* ORIENTAL USES OF SOYBEANS AS FOOD WITH ATTENTION TO FERMENTED PRODUCTS. II. CHINA.

Allan K. Smith.

Soybean Dig. 9(5): 26-28, 30, 32, 34. March 1949.

371 \* ORIENTAL USES OF SOYBEANS AS FOOD WITH ATTENTION TO FERMENTED PRODUCTS. NOTES ON ORIENTAL FARMING PRACTICES. III. CHINESE INSTITUTIONS.

Allan K. Smith.

Soybean Dig. 9(6): 23-24, 26, 28, 30-31. April 1949.

372 \* ORIENTAL USES OF SOYBEANS AS FOOD WITH ATTENTION TO FERMENTED PRODUCTS. NOTES ON ORIENTAL FARMING PRACTICES. IV. JAPAN.

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Raymond E. Culbertson<sup>2</sup> and Allan K. Smith.

Soybean Dig. 9(8): 15-18, 20, 22. June 1949.

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AIC-234. June 1949. 40 pp.; reissued as

ARS-71-17. July 1961. 65 pp. [Reissued]

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<sup>2</sup> Former Adviser, Agricultural Production, U.S. Military Forces in Korea.

958 USE OF UNITED STATES SOYBEANS IN JAPAN.  
A. K. Smith.  
ARS-71-12. April 1958. 36 pp.

1072 RESEARCH ON THE INCREASING USE OF U.S. SOYBEANS IN JAPAN.  
Allan K. Smith.  
Soybean Dig. 19(11): 62-65. September 1959.

1118 JAPANESE SCIENTISTS LOOK AT U.S. SOYBEANS.  
Tokiji Watanabe and Kazuo Shibasaki.  
Soybean Dig. 19(11): 66-68. September 1959.

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[Dean H. Mayberry]  
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K. Shibasaki and C. W. Hesseltine.  
J. Biochem. Microbiol. Technol. Eng. 3(2): 161-174. July 1961.

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Develop. Ind. Microbiol. 2: 205-214. 1961.

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C. W. Hesseltine and K. Shibasaki.  
Appl. Microbiol. 9(6): 515-518. November 1961.

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833 NEED FOR RESEARCH ON SOYBEAN OIL MEAL. PARTS I AND II.  
L. L. McKinney and J. C. Cowan.  
Soybean Dig. 16(6): 14-16. April 1956; 16(7): 14-16,  
18. May 1956.

3-C \* INEFFECTIVENESS OF ARGININE IN OVERCOMING SOYBEAN  
GROWTH INHIBITOR IN THE CHICK.  
C. H. Hill, R. Borchers, and C. W. Ackerson, University  
of Nebraska, Lincoln.<sup>1</sup>  
Poultry Sci. 31(6): 1098-1100. November 1952.

786 MEASUREMENT OF UREASE ACTIVITY IN SOYBEAN OIL MEAL.  
C. Bradford Croston, Allan K. Smith, and J. C. Cowan.  
J. Am. Oil Chemists' Soc. 32(5): 279-282. May 1955.

848 UREASE ACTIVITY IN SOYBEAN MEAL PRODUCTS.  
Allan K. Smith, Paul A. Belter, and Robert L. Anderson.  
J. Am. Oil Chemists' Soc. 33(8): 360-363. August 1956.

8-C THE PHOTOMETRIC DETERMINATION OF THE HEMAGGLUTINATING ACTIVITY OF SOYIN AND CRUDE SOYBEAN EXTRACTS.  
Irvin E. Liener, University of Minnesota, St. Paul.<sup>1</sup>  
Arch. Biochem. Biophys. 54(1): 223-231. January 1955.

18-C CHEMICAL MODIFICATION OF THE SOYBEAN HEMAGGLUTININ.  
Irvin E. Liener and Shohachi Wada, University of Minnesota, St. Paul.<sup>1</sup>  
J. Biol. Chem. 222(2): 695-704. October 1956.

38-C \* INACTIVATION STUDIES ON THE SOYBEAN HEMAGGLUTININ.  
Irvin E. Liener, University of Minnesota, St. Paul.<sup>1</sup>  
J. Biol. Chem. 233(2): 401-405. August 1958.

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F. C. Mayer, R. E. Campbell, A. K. Smith, and L. L. McKinney.  
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1306 THE ALLEGED "THIAMINE-DESTROYING FACTOR" IN SOYBEANS.  
F. B. Weakley, A. C. Eldridge, and L. L. McKinney.  
J. Agr. Food Chem. 9(6): 435-439. November-December 1961.

PATENTS ON EDIBLE SOYBEAN PROTEIN PRODUCTS

1936-1961

[These patents are assigned to the Secretary of Agriculture. Printed copies of patents may be obtained only by purchase (25 cents each) from the Commissioner of Patents, U.S. Patent Office, Washington 25, D.C. Order by number, do not send stamps.]

SOY WHIP.

Arthur C. Beckel, Letta I. DeVoss, Paul A. Belter,  
and Allan K. Smith.  
U.S. Patent 2,444,241. June 29, 1948.

VEGETABLE GEL.

Letta I. DeVoss, Arthur C. Beckel, and Paul A. Belter.  
U.S. Patent 2,495,706. January 31, 1950.

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Arthur C. Beckel and Paul A. Belter.  
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Elmer F. Glabe.  
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Allan K. Smith, Clifford W. Hesseltine,  
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