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C. B. van Niel -- Publications

1923 Ueber die Beweglichkeit und das Vorkommen von Geiszein bei einigen Sarcina Arten. Centralbl. Bakteriolog. Parasitenk. II. Abt. 69, 289-298.

1924-5 Ueber Spiegelbilder erzeugende Hefenarten und die neue Hefengattung Sporobolomyces. Centralbl. Bakteriolog. Parasitenk. 63, 1-20 (With A. J. Kluyver).

1925 Die Fehlerhafte Anwendung biologischer Agenzien in der organischen Chemie: Eine Warnung. Ber. d. deut. Chem. Gesellsch. 58, 1606-1610 (With F. Visser 't Hooft).

1926 Ueber Bacillus funicularius n. sp., nebst einigen Bemerkungen über Gallionella ferruginea Ehrenberg. Planta, Arch. wissenschaft. Botanik, 2, 507-526 (With A. J. Kluyver).

De wijzen van voortbeweging van Mikroorganismen. Nederl. Tijdschr. Hygiene, Microbiol. en Serol. 1, 305-326.

1927 Same title, Pt. II. Ibid. 2, 93-113.

Die Herstellung von Essigsäure, Zitronensäure und Milchsäure; von Direktor Alfred Wagner; 2 vols. Book review in Chem. Weekbl. ??

Sporobolomyces-- ein Basidiomyzet? Ann. Mycologici, 25, 389-394 (With A. J. Kluyver).

Notiz über die quantitative Bestimmung von Diacetyl und Acetylmethylcarbinol. Biochem. Z., 187, 472-478.

1928 Selman A. Waksman's "Principles of Soil Microbiology." Book review in Chem. Weekbl. ??

The Propionic Acid Bacteria. viii plus 187 pp. J. W. Boissevain & Co., Haarlem.

1929 Ueber das Butteraroma. Biochem. Z., 210, 234-251 (With A. J. Kluyver and H. G. Derx).

1930 Photosynthesis of Bacteria. In: Contributions to Marine Biology. Stanford Univ. Press, pp. 161-169.

1931 On the morphology and physiology of the purple and green sulfur bacteria. Arch. Mikrobiol., 3, 1-112.

On the purple bacteria and their significance for the study of photosynthesis. Rec. Trav. Botan. Neerland., 28, 245-274 (With F. M. Muller).

VAN NIEL, C.B.

- 1935 Photosynthesis of Bacteria. Cold Spring Harbor Symposia Quant. Biol. III, 138-150.
- A note on the apparent absence of Azotobacter in soils. Arch. Mikrob. 6, 215-218.
- Studies on the pigments of the purple bacteria. I. On spirilloxanthin, a component of the pigment complex of Spirillum rubrum. Ibid. 219-229 (With James H. C. Smith).
- 1936 Prospects for a natural system of classification of bacteria. Centralbl. Bakteriol. Parasitenk. II. Abt., 94, 369-403 (With A. J. Kluyver).
- On the metabolism of the Thiorhodaceae. Arch. Mikrobiol., 7, 323-358.
- Les photosynthèses bactériennes. Bull. Assoc. Dipl. Microbiol. Fac. de Pharmacie de Nancy, No. 13, 3-18.
- 1937 The biochemistry of bacteria. Ann. Rev. Biochem., 6, 595-620.
- 1938 The quantitative estimation of bacteriochlorophyll. Enzymologia, 5, 244-250 (With William Arnold).
- 1939 A. J. Kluyver als Mikrobioloog en als Biochemikus. Chem. Weekbl., 36, No. 19; 1-36.
- 1940 The biochemistry of micro-organisms; an approach to general and comparative biochemistry. In: "The Cell and Protoplasm," Public. No. 14 Amer. Assoc. Advancement Science, pp. 106-119.
- 1941 On the occurrence of fermentative assimilation. J. Cell. and Comp. Physiol., 17, 49-56 (With E. H. Anderson).
- The bacterial photosyntheses and their importance for the general problem of photosynthesis. Advances Enzymology, 1, 263-328.
- 1942 The main outlines of bacterial classification. J. Bacteriol., 42, 437-466 (With R. Y. Stanier).
- On the metabolism of Candida albicans. J. Cell. and Comp. Physiol. 20, 95-112 (With Arthur L. Cohen).
- Radioactive carbon as an indicator of carbon dioxide utilization. VIII. The role of carbon dioxide in cellular metabolism. Proc. Natl. Acad. Sci., 28, 8-15 (With S. Ruben, S. F. Carson, M. D. Kamen and J. W. Foster).
- Same title; IX. The assimilation of carbon dioxide by protozoa. Ibid., 157-161 (With J. O. Thomas, S. Ruben and M. D. Kamen).

- 1943 Biochemistry of Microorganisms. Ann. Rev. Biochem., XII, 551-586.  
Biochemical problems of the chemo-autotrophic bacteria. Physiol. Revs., 23, 338-354.
- 1944 The culture, general physiology, morphology, and classification of the non-sulfur purple and brown bacteria. Bacteriol. Rev., 8, 1-118.  
Studies on the pigments of the purple bacteria. II. A spectroscopic and stereochemical investigation of spirilloxanthin. Arch. Biochem. 5, 243-264 (With A. Polgár and L. Zechmeister).  
Recent advances in our knowledge of the physiology of microorganisms. Bacteriol. Revs. 8, 225-234.
- 1946 Review of ZoBell's "Marine Microbiology." Quar. Rev. Biol., 21, 302-303.  
The classification and natural relationships of bacteria. Cold Spring Harbor Symposia on Quantitative Biology, XI, 285-301.  
Life and Light--Photosynthesis. In: "Science and Life in the World," George Westinghouse Centennial Forum, Vol. II, pp. 149-161 (McGraw-Hill Book Co.).
- 1947 Studies on the pigments of the purple bacteria. III. The yellow and red pigments of Rhodospseudomonas spheroides. Antonie van Leeuwenhoek, J. Microbiol. & Serol., 12, 156-166.
- 1948 Sections in Bergey's Manual of Determinative Bacteriology, 6th ed.: Genus Propionibacterium (pp. 372-379); Suborder Rhodobacteriineae (pp. 838-874); Family Beggiatoaceae (pp. 988-996); Fam. Achromatiaceae (pp. 997-1001).
- 1949 The comparative biochemistry of photosynthesis. Amer. Scientist, 37, 371-383.  
The kinetics of growth of microorganisms. In: The Chemistry and Physiology of Growth, Ed. Arthur K. Parpart, pp. 91-105 (Princeton Univ. Press).  
The Comparative Biochemistry of Photosynthesis. In: "Photosynthesis in Plants," Ed. James Franck & Walter E. Loomis; pp. 437-495 (Iowa State Coll. Press).  
The "Delft School" and the rise of general microbiology. Bacteriol. Revs., 13, 161-174.
- 1952 Review of Werkman & Wilson's "Bacterial Physiology." Arch. Biochem. Biophys., 37, 498-501.  
Review of "Carbon dioxide assimilation and photosynthesis," Science, 115, 611-612.

- 1952 Bacterial Photosyntheses. Chapter 75 of "The Enzymes," Vol. II, Pt. 2, Ed. James B. Sumner & Karl Myrbäck; pp. 1074-1088 (Acad. Press).
- Review of E. I. Rabinowitch's "Photosynthesis and Related Processes," Vol. II, Pt. 1, in: News Letter Soc. Amer. Bacteriologists, 18, 25-26.
- Experiments on bacterial denitrification. J. Bacteriol., 64, 397-412 (With M. B. Allen).
- A note on Pseudomonas stutzeri. Ibid. 413-422 (With M. B. Allen).
- On the energetics of the photosyntheses in green sulfur bacteria. J. Gen. Physiol. 36, 161-171 (With Helge Larsen and C. S. Yocum).
- 1953 Introductory remarks on the comparative biochemistry of microorganisms. J. Cell. and Comp. Physiol. 41, Suppl. 1, 11-38.
- On the photochemical reduction of nitrate by algae. Biochim. Biophys. Acta, 12, 67-74 (With M. B. Allen and B. E. Wright).
- 1954 The chemoautotrophic and photosynthetic bacteria. Ann. Rev. Microbiol. 8, 105-132.
- 1955 The microbe as a whole. In: "Perspectives and Horizons in Microbiology," Ed. Selman A. Waksman; pp. 3-12, Rutgers Univ. Press.
- On radicalism and conservatism in science. Bacteriol. Revs. 19, 1-5.
- Natural selection in the microbial world. J. Gen. Microbiol. 13, 201-217.
- Classification and taxonomy of the bacteria and bluegreen algae. In: "A Century of Progress in the Natural Sciences--1853-1953," pp. 89-114 (Calif. Acad. Sci.).
- 1956 "The Microbe's Contribution to Biology." Harvard Univ. Press, vii plus 182 pp. (With A. J. Kluyver).
- Studies in carotenogenesis. 21. The nature of the changes in carotenoid synthesis in Rhodospirillum rubrum during growth. Biochem. J. 63, 408-412 (With T. W. Goodwin and M. E. Sissins).
- Prof. A. J. Kluyver, For. Mem. R. S. Nature, 178, 14-15.
- A. J. Kluyver, Microbiologist. Science, 124, 308.
- Etude de la glycolyse de Zymasarcina ventriculi. Ann. Inst. Pasteur, 91, 363-368 (With G. Milhaud and J.-P. Aubert).

- 1956 In memoriam Prof. Dr. Ir. A. J. Kluyver. *Antonie van Leeuwenhoek, J. Microbiol. Serol.*, 22, 209-217.
- Im memoriam Professor Dr. A. J. Kluyver. *News Letter, Soc. Amer. Bacteriol.*, 22, 2-3.
- 1957 Review of E. I. Rabinowitch's "Photosynthesis and related processes," Vol. II, Pt. 2, In: *Bacteriol. News, Soc. Amer. Bacteriologists*, 23, 15-16.
- Levensbericht van Albert Jan Kluyver (3 juni 1888-14 mei 1956). In: *Jaarboek Kon. Nederl. Akad. Wetensch. 1956-1957*, pp. 1-7.
- Obituary Notice: Albert Jan Kluyver, 1888-1956. *J. Gen. Microbiol.* 16, 499-521.
- Sections in 7th Ed. of Bergey's Manual of Determinative Bacteriology: *Rhodobacteriineae* (pp. 35-67); *Propionibacterium* (pp. 569-576); *Achromatiaceae* (pp. 851-853).
- 1958 Introduction to 2nd edition of Clifford Dobell's "Antony van Leeuwenhoek & his little animals," Russell & Russell, N.Y.; pp. i-vii.
- 1959 "Bacteria," Chapter 3 of 2nd ed. of Ward & Whipple's "Freshwater Biology," ed. W. T. Edmondson; pp. 16-46 (Wiley, N.Y.) (With R. Y. Stanier).
- Introduction to Chapter "Cellulases" in "Boring & Fouling Organisms," ed. D. L. Ray, Univ. of Wash. Press; pp. 249-252.
- Kluyver's contributions to microbiology and biochemistry. In: "Albert Jan Kluyver, His Life and Work," pp. 68-156. Also English translations of articles in same volume, pp. vii-xv; 3-67; 157-210; 329-348; 393-415; 503-524; 565-567.
- 1960 Nomenclatorial standing of names of bacterial genera based on descriptions of impure culture. *Internatl. Bull. Bacteriological nomencl. & Taxonomy*, 10, 29-30.
- Review of "The Bacteria: A Treatise on Structure and Function." Vol. I, ed. I. C. Gunsalus & R. Y. Stanier; Acad. Press, Arch. Biochem. Biophys.
- Articles in McGraw-Hill Encyclopedia of Science and Technology: "Bacterial anabolism, Bacteriology, Fermentation, Microbiology, and Rhodobacteriineae," Vol. 2, pp. 47-63; 66-67; 5, 215; 8, 348; 11, 550-553.
- 1961 Introductory comments to session of the symposium "Light and Life," ed. William D. McElroy and Bentley Glass, pp. 315-316 (Johns Hopkins Press).

- 1961 Review of A. Schierbeek's "Measuring the Invisible World. The Life and Works of Antoni van Leeuwenhoek," in *Isis*, 52, 120-122.
- 1962 The concept of a bacterium. *Arch. Mikrobiol.*, 42, 17-35 (With R. Y. Stanier).
- The present status of the comparative study of photosynthesis. *Ann. Rev. Plant Physiol.*, 13, 1-26.
- 1963 Modern Microbiology, Review of Wayne W. Umbreit's textbook by that name. *Science*, 139, 202-203.
- The absence of enhancement (Emerson effect) in the photosynthesis of *Rhodospirillum rubrum*. In: "Microalgae & Photosynthetic Bacteria." Japanese Soc. Plant Physiologists, Tokyo, pp. 297-307 (With L. R. Blinks).
- A brief survey of the photosynthetic bacteria. In: "Bacterial Photosynthesis," H. Gest, A. San Pietro, L. P. Vernon, eds. Antioch Press, Yellow Springs, Ohio; pp. 459-467.
- "Selected Papers of Ernst Georg Pringsheim," Ed. and preface by C. B. van Niel. Institute of Microbiology, Rutgers Univ. Press. ix plus 331 pp.
- 1965 On aquatic microbiology today. Review of "Principles and Applications in Aquatic Microbiology: Proceedings of the Rudolfs Research Conference, ed. H. Heukelekian and Norman C. Dondero. *Science*, 16 April, 1965; 353 pp.
- Microbiology and the developing areas. Review of "Global Impacts of Applied Microbiology," *Science*, 150, 1702-1703.
- 1966 Microbiology and molecular biology. Chapter IV of Symposium on stability in dynamic microbial systems. *Quar. Rev. Biology*, 41, 105-112.
- Lipmann's concept of the metabolic generation and utilization of phosphate bond energy: A historical appreciation. In: "Current Aspects of Biochemical Energetics," Acad. Press; 9-25 pp.
- 1967 Prefatory Chapter: The education of a microbiologist; some reflections. *Ann. Rev. Microbiol.*, 21, 1-30.
- 1971 Review of "The Yeasts, A Taxonomic Study." Second Edition, ed. J. Lodder. *Science*, 172, 552.
- Techniques for the enrichment, isolation, and maintenance of the photosynthetic bacteria. In: "Methods in Enzymology," Vol. XXIII - "Photosynthesis" Part A, pp. 3-28. (Acad. Press).
- 1972 On the mechanism of ballistospore discharge. *Arch. Mikrobiol.*, 84, 129-140 (With G. E. Garner and A. L. Cohen).

(SUPPLEMENT)

PUBLICATIONS -- DR. VAN NIEL'S STUDENTS AND/OR CO-WORKERS

(Partial List)

- 1950 Allen, M. B. The dynamic nature of thermophily. *J. gen. Physiol.*, 33: 205-214.
- 1952 A. Schatz. Uptake of carbon dioxide, hydrogen, and oxygen by *Hydrogenomonas facilis*. *J. gen. Microbiol.* 6: 328-335.
- 1952 A. Schatz. Growth and hydrogenase activity of a new bacterium, *Hydrogenomonas facilis*. *J. Bacteriol.* 63: 87-98.
- 1952 Lara, F. J. S., & J. L. Stokes. Oxidation of citrate by *Escherichia coli*. *J. Bacteriol.*, 63: 415-420.
- 1952 Gest, H., & J. L. Stokes. The effect of CO<sub>2</sub> on the reduction of methylene blue by microorganisms. *Antonie van Leeuwenhoek*, 18, 55-62.
- 1952 Stokes, J. L. Inhibition of microbial oxidation, assimilation, and adaptive enzyme formation by methylene blue. *Antonie van Leeuwenhoek*, 18: 63-81.
- 1952 Vishniac, Wolf. The metabolism of *Thiobacillus thioparus*. I. The oxidation of thiosulfate. *J. Bacteriol.*, 64: 363-375.
- 1951 Ray, D. L. Agglutination of bacteria: A feeding method in the soil amoeba *Hartmanella* sp. *J. Exp. Zool.*, 118: 443-466.
- 1953 Wright, Barbara E. The effect of alpha hydroxy acids on reversion of a glycineless *E. coli* mutant. *C. Rend. Trav. Labor. Carlsberg, Ser. Physiol.*, 173-212.
- 1953 Whiteley, H. R. Cofactor requirements for the decarboxylation of succinate. *J. Amer. Chem. Soc.*, 75: 1518-1519.
- 1953 Wright, Barbara E. Auto-adaptation: a new phenomenon observed in a bacterial population. *J. Bacteriol.*, 66: 407-420.
- 1954 Pinsent, Jane. The need for selenite and molybdate in the formation of formic dehydrogenase by members of the *Coli-aerogenes* group of bacteria. *Biochem. J.*, 57: 10-16.
- 1955 Winfield, M. E. Reactions of hydrogen gas in solution. *Rev. Pure and Appl. Chem., Royal Australian Inst.*, 5: 217-246.
- 1956 Verhoeven, W. Studies on true dissimilatory nitrate reduction. V. Nitric oxide production and consumption by micro-organisms. *Antonie van Leeuwenhoek*, 22: 385-406.
- 1957 Battley, Edwin H. Carbon determination with alkaline persulfate in the Warburg manometer. *J. Biol. Chem.*, 226: 237-240.

- 1957 Whiteley, H. R. Fermentation of amino acids by Micrococcus aerogenes. J. Bacteriol., 74: 324-330.
- 1957 Whiteley, H. R., & E. J. Ordal. Fermentation of alpha keto acids by Micrococcus aerogenes and M. lactilyticus. J. Bacteriol., 74: 331-336.
- 1957 Kucera, Sonia, & R. S. Wolfe. A selective enrichment method for Gallionella ferruginea. J. Bacteriol., 74: 344-349.
- 1957 Neff, Robert J. Purification, axenic cultivation, and distribution of a soil amoeba, Acanthamoeba sp. J. Protozool., 4: 176-182.
- 1958 Neff, Robert J. Mechanisms of purifying amoeba by migration on agar surfaces. J. Protozool., 5: 226-231.
- 1960 Veldkamp, H. J. Isolation and characteristics of Treponema zuelzeriae, nov. spec., an anaerobic, free-living spirochete. Ant. van Leeuwenhoek, 26: 103-125.
- 1960 Battley, E. H. Growth reaction equations for Saccharomyces cerevisiae. Physiol. Plantarum, 13: 192-203.
- 1960 Battley, E. H. Enthalpy changes accompanying the growth of Saccharomyces cerevisiae. Physiol. Plantarum, 13: 628-640.
- 1960 Battley, E. H. A theoretical approach to the study of the thermodynamics of growth of Saccharomyces cerevisiae (Hansen). Physiol. Plantarum, 13: 674-686.
- 1960 Scher, Stanley, & Michael Proctor. Studies with photosynthetic bacteria: Anaerobic oxidation of aromatic compounds. In: "Comparative Biochemistry of Photoreactive Systems," Ed. M. B. Allen. Acad. Press, pp. 387-394.
- 1961 Veldkamp, H. A study of two marine agar-decomposing, facultatively anaerobic myxobacteria. J. gen. Microbiol., 26: 331-342.
- 1963 La Riviere, J. W. M. Cultivation and properties of Thiovulum majus Hinze. In: Symposium on Marine Microbiology, ed. C. H. Oppenheimer. Chas. C. Thomas, Springfield, Ill.; pp. 61-72.
- 1963 Leadbetter, E. R., & Roger Whittenbury. Equivalence of hydrogen and thiosulfate in bacterial photosynthesis. Proc. Natl. Acad. Sci., 50: 1128-1135.
- 1963 London, J. Cytochrome in Thiobacillus thiooxidans. Sci., 140: 409.
- 1963 London, J. Thiobacillus intermedius, nov. sp.; A novel type of facultative autotr., Arch. Mikrobiol., 46: 329-337.



- 1963 Canale-Parola, E. A red pigment produced by aerobic sporeforming bacteria. Arch. Mikrobiol., 46: 414-427.
- 1964 London, J., & S. C. Rittenberg. Path of sulfide and thiosulfate oxidation by Thiobacilli. Proc. Natl. Acad. Sci., 52: 1183-1190.
- 1964 Poindexter, Jeanne Stove. Biological properties and classification of the Caulobacter group. Bacteriol. Revs. 28: 231-295.
- 1965 Bennett, John F., & E. Canale-Parola. The taxonomic status of Lineola longa. Arch. Mikrobiol., 52: 197-205.
- 1967 Bovell, Carlton. The effect of sodium nitrite on the growth of Micrococcus denitrificans. Arch. Mikrobiol., 59: 13-19.