

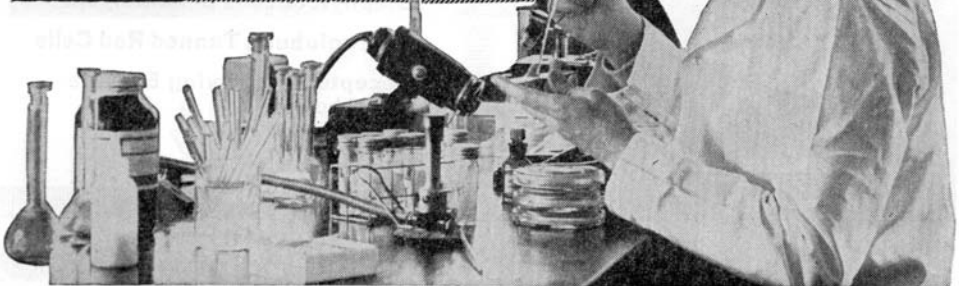
DIFCO

*Microbiological
reagents
and media*

***delivered
to your bench quickly***

Hundreds of different products in the complete Difco range are kept in stock ready to be on your bench without delay. We shall always be pleased to obtain other items specially to order.

Speed, convenience, reliability . . . and remember that Difco offer the only *complete* line of culture media available in U.K. Please send for the latest literature concerning your special interests.



BAIRD & TATLOCK (LONDON) LTD., CHADWELL HEATH, ESSEX, ENGLAND

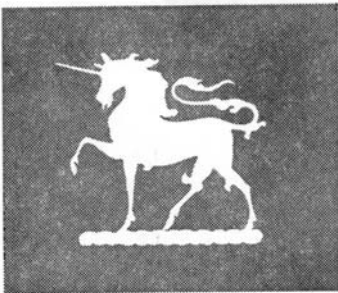
Branches in London, Manchester and Glasgow.

TAS/DO.13

Burroughs Wellcome & Co.*

FOR BIOLOGICAL DIAGNOSTIC REAGENTS

★ Burroughs Wellcome & Co. supply a large range of Biological Diagnostic Reagents. A complete list of these products of the Wellcome Research Laboratories is available on request.



Normal Horse Blood
(oxalated or defibrinated)

Normal Horse Sera

Sheep Blood, defibrinated
(formolised, no preservative or
Alsever solution)

**Standard Agglutinable
Suspensions**

Diagnostic Sera
(specific for slide or tube test)
for—E. coli
Salmonella
Shigella
H. influenzae, etc.

Streptococcus Grouping Sera

**Wassermann, Kahn and
Cardiolipin Antigens**

Gonococcus Antigen

Hæmolytic Serum

Preserved Complement
(liquid or dried)

Species Precipitating Sera

Penicillinase

Rabbit Plasma, dried
(for coagulase test)

Coombs's Reagent

Streptolysin-O, dried

Staphylococcus a-hæmolysin

Thyroglobulin Tanned Red Cells

Receptor-Destroying Enzyme
(V. cholerae)

BURROUGHS WELLCOME & CO. (The Wellcome Foundation Ltd.)
THE WELLCOME BUILDING, EUSTON ROAD, LONDON, N.W.1

The Journal of General Microbiology

Editors: B. C. J. G. KNIGHT and A. F. B. STANDFAST

Vol. 29, No. 1

35s.

September 1962

- J. BEUMER. Jules Bordet 1870-1961.
M. R. J. SALTON. Cell-wall structure and biosynthesis.
P. MITCHELL. Metabolism, transport and morphogenesis: which drives which?
D. E. HUGHES. The bacterial cytoplasmic membrane.
G. D. HUNTER and G. N. GODSON. The final stages of protein synthesis and the role of lipids in the process.
K. MCQUILLEN. Bacterial ribosomes and protein synthesis.
J. LASCELLES. The chromatophores of photosynthetic bacteria.
S. DAGLEY, A. E. WHITE and D. G. WILD. The effect of various drugs and inorganic ions on bacterial ribonucleoprotein.
T. H. BLACKBURN and P. N. HOBSON. Further studies on the isolation of proteolytic bacteria from the sheep rumen.
J. STARKA. Cellular division and reproduction of bacteriophage in synchronized cultures of *Escherichia coli*.
P. PEASE. Evidence that *Streptobacillus moniliformis* is an intermediate stage between a corynebacterium and its L-form or derived PPLO.
A. M. COOK and B. M. LUND. Total counts of bacterial spores using counting slides.
M. VANDEPUTTE and P. DE SOMER. Virus-cell relation in rat polyoma tumours.
F. J. BERGERSEN. The effects of partial pressure of oxygen upon respiration and nitrogen fixation by soybean root nodules.
J. M. DINGLEY, J. DONE, A. TAYLOR and D. W. RUSSELL. The production of sporidesmin and sporidesmolides by wild isolates of *Pithomyces chartarum* in surface and in submerged culture.
P. M. SCHOLES. Some observations on the cultivation, fruiting and germination of *Fuligo septica*.
P. R. ADIGA, K. S. SASTRY and P. S. SARMA. Amino acid interrelationships in cysteine toxicity in *Neurospora crassa*.
J. F. GARDNER and J. LASCELLES. The requirement for acetate of a streptomycin-resistant strain of *Staphylococcus aureus*.
G. L. ADA, A. ABBOTT, S. G. ANDERSON and F. D. COLLINS. Particle counts and some chemical properties of Murray Valley encephalitis virus.
K. J. STEEL and J. MIDGLEY. Decarboxylase and other reactions of some Gram-negative rods.
D. M. WEBLEY, R. B. DUFF and G. ANDERSON. The metabolism of iron-, zinc- and manganese-deficient *Nocardia opaca*.

Subscription 80s. per volume of 3 parts.

Orders should be sent to

CAMBRIDGE UNIVERSITY PRESS

BENTLEY HOUSE, 200 EUSTON ROAD, LONDON, N.W. 1

FULL PARTICULARS OF THE

JOURNALS

PUBLISHED BY THE

CAMBRIDGE UNIVERSITY PRESS

MAY BE HAD FROM

THE MANAGER, CAMBRIDGE UNIVERSITY PRESS

BENTLEY HOUSE, 200 EUSTON ROAD

LONDON, N.W.1

CONTENTS

(All rights reserved)

| | PAGE |
|---|------|
| PRETORIUS, W. A. Some observations on the role of coliphages in the number of <i>Escherichia coli</i> in oxidation ponds | 279 |
| TWIGG, G. I. The distribution of the underground rat population of a south Yorkshire drift mine | 283 |
| KÖHLER-KUBELKA, NEDA. Diphtheria-tetanus-pertussis vaccine combined with <i>Bordetella parapertussis</i> vaccine | 289 |
| MORTON, J. D. Survival of microbial aerosols: experimental observations and calculations | 295 |
| DATTA, NAOMI Transmissible drug resistance in an epidemic strain of <i>Salmonella typhimurium</i> | 301 |
| GERICHTER, CH. B. and BOROS, D. L. Dynamics of infection of the blood stream and internal organs of white mice with <i>Salmonella typhi</i> by intraperitoneal injection | 311 |
| GRIST, N. R. Type A7 Coxsackie (type 4 poliomyelitis) virus infection in Scotland | 323 |
| VAN SOESTBERGEN, A. A. The titration of toxoplasma-antibody | 333 |
| KINGSTON, D., LIDWELL, O. M. and WILLIAMS, R. E. O. The epidemiology of the common cold. III. The effect of ventilation, air disinfection and room size | 341 |
| NASH, T. The bactericidal properties of compounds which protect living cells against freezing damage | 353 |
| POWELL, O. W. and STALLMAN, N. D. The incidence and significance of Phase I complement-fixing antibody in Q fever | 359 |
| TOMLINSON, T. G., LOVELESS, J. E. and SEAR, L. G. Effect of treatment in percolating filters on the numbers of bacteria in sewage in relation to the composition and size of filtering medium | 365 |
| BENNETT, B. M. On combining estimates of relative potency in bioassay | 379 |
| ROUNTREE, PHYLLIS M. and BEARD, MARY A. Observations on the distribution of <i>Staphylococcus aureus</i> in the atmosphere of a surgical ward | 387 |
| CAPLAN, HAROLD. Observations on the role of hospital blankets as reservoirs of infection. | 401 |

The Journal of Hygiene is issued in four parts to a volume.

Quotations can be given for back volumes on application.

Papers for publication should be sent to Lt.-Col. H. J. BENSTED, c/o Lister Institute of Preventive Medicine, Chelsea Bridge Road, London, S.W. 1. Other communications should be addressed to the University Press, Cambridge.

Papers forwarded to the Editor for publication are understood to be offered to *The Journal of Hygiene* alone, unless the contrary is stated.

Contributors receive twenty-five copies of their paper free. Additional copies, not exceeding two hundred (except in special cases) may be purchased; these should be ordered when the final proof is returned.

The subscription price is £4. 10s. per volume (post free), payable in advance; single numbers 30s. net. Subscriptions may be sent to any Bookseller, or to The Cambridge University Press, Bentley House, 200 Euston Road, London, N.W. 1.

The subscription price in the U.S.A., is \$17.50. Single parts \$5.00. Enquiries should be addressed to the American Branch of the Press at 32 East 57th Street, New York 22, N.Y.