# BRITISH JOURNAL OF PHARMACOLOGY AND CHEMOTHERAPY

### EDITED FOR

### THE BRITISH PHARMACOLOGICAL SOCIETY

BY

H. M. ADAM H. BLASCHKO F. HAWKING P. HEY
W. E. ORMEROD J. P. QUILLIAM J. M. ROBSON R. S. STACEY

J. R. VANE M. WEATHERALL R. WIEN

A. D. MACDONALD (Chairman) J. M. WALKER (Secretary)

G. P. LEWIS (Press Editor) E. W. HORTON (Assistant Press Editor)

In co-operation with the EDITOR of the British Medical Journal

VOLUME 17, 1961

LONDON
BRITISH MEDICAL ASSOCIATION
TAVISTOCK SQUARE, W.C.1

#### NOTICE TO CONTRIBUTORS

The Journal, which appears two-monthly, publishes original work in pharmacology and experimental chemotherapy, including the biochemical and pathological aspects of the subject. Short papers and brief notes on methods may also be accepted. MSS. submitted for publication should be addressed to the Secretary to the Editorial Board, Dr J. M. Walker, Department of Pharmacology, South Parks Road, Oxford. Papers submitted to the Journal are only accepted on the understanding that they are subject to editorial revision, and that they have not been and will not be published in whole or in part in any other journal. When submitting a paper for publication, author(s) should include a statement to this effect.

Preparation of MSS. and Illustrations.—Authors are recommended to consult the current number of the Journal before preparing a MS. so that the presentation of their paper follows current practice of the Journal. Foreign-speaking contributors are advised, where possible, to seek the help of some British pharmacologist, known to them, in revising manuscripts before submission. Text and Tables should be in double-spaced typing on one side only of quarto or foolscap sheets with a margin of not less than 11 in. on the left. The title, the name(s) and address(es) of the author(s), and a suggested short title should be typed on the first sheet. This should be followed by a brief but self-explanatory summary in abstract form on a separate sheet giving the main results and conclusions. The text should then start on a separate sheet. In stating the object, reference should only be made to previous work if it has a direct bearing on the subject. Papers must be as concise as possible, but only recognized physical and chemical abbreviations may be used. All other names must be given in full. Abbreviations consisting of initial letters of words, etc., are not acceptable. Official or approved names should always be used. but, when these are not available, chemical or trade-names may be employed. On first mention, tradenames, serial numbers, etc., must be defined in terms of chemical names. The contributor should consider whether concentrations of solutions might be best stated in terms of weight per volume or molarity. Where comparisons are made it is often advisable to use molarities. Reference to other work should always give the author's name followed by the year of publication; more than one paper in one year being indicated by a small letter (a, b, c) after the date. On first reference to work by three or more authors, all the surnames should be given in full, but subsequently only the surname of the first author followed by et al. and the date is necessary. Footnotes and notes added in proof should be avoided.

TABLES.—Tables are referred to in the text by Arabic numerals and each must be typed on a separate sheet. Tables should be comprehensive without reference to the text. Explanations should follow the heading of the Table. Footnotes are not used.

ILLUSTRATIONS.—Illustrations are referred to in the text by Arabic numerals. The legend for each is to be typed on a separate sheet, numbered correspondingly, and should make the illustration understandable independently of the text. Line drawings and graphs are to be carefully and boldly drawn in Indian ink on tracing linen, or Bristol board, or stout smooth white paper; blue-lined graph paper of good quality may be used for graphs. All lettering and numerals must be written lightly but legibly in pencil. Where desirable, kymograph tracings should be calibrated in both dimensions. Symbols which are to appear in the legend should be chosen from the following:

 $X + \bullet \circ \blacksquare \Box \land \land \lor \lor \bullet \diamond \diamond$ 

The original drawing should always be sent. Photographic copies are useful to the editors, but are insufficient by themselves. Originals should be about two to three times the suggested final size, and in no case larger than foolscap for ease in sending through the post. Mounted originals of kymograph tracings, rather than copies, should be sent, as should those of x-ray or other illustrations for half-tone reproduction. Photographs and photomicrographs should be printed on glossy paper and should be larger than the size desired for reproduction; particular care must be taken to ensure adequate definition, contrast, etc., in the prints submitted.

REFERENCES.—References should be arranged according to the Harvard system at the end of the paper in the alphabetical order of the names of the first author of each paper, and should include: author's name, followed by initials; year of publication in parentheses; title of article; title of publication, underlined, and abbreviated in accordance with the World Medical Periodicals (2nd ed.); volume number in Arabic numerals, underlined with a wavy line to indicate bold type; the number of the first and last page in Arabic numerals. The reference will then appear in type thus:

Burn, J. H. & Rand, M. J. (1958). The depressor action of dopamine and adrenaline. *Brit. J. Pharmacol.*, 13, 471-479.

When reference is made to a book, the author's name and the year should be followed by: title (underlined); editor's name and volume number or edition (if appropriate); page (p. or pp.); town of origin; publisher. The reference will appear in type thus:

CLARK, A. J. (1940). Applied Pharmacology, 7th ed., p. 378. London: Churchill.

Proofs.—Two page proofs will be supplied, one of which may be retained by the author. Authors are requested to read their proofs immediately on receipt, correct in pencil, and return them at once to the Press Editor. It is assumed that all but verbal corrections have been made in the original MS.: an allowance of eightpence/page is made for alterations in the proof (printer's errors excepted) and contributors will be charged for any excess.

REPRINTS.—Fifty reprints of an artic'e will, if desired, be given to an author or divided among the authors. Additional reprints at cost price can be supplied if application is made on the postcard sent out with the proofs or to the publishers.

COPYRIGHT.—Papers which have been published become the property of the JOURNAL and permission to republish in part or whole must be obtained from the Editors.

# BRITISH JOURNAL OF PHARMACOLOGY AND CHEMOTHERAPY AUGUST, 1961. Vol. 17. No. 1.

## CONTENTS

	PAGE
PROCEEDINGS OF THE BRITISH PHARMACOLOGICAL SOCIETY, EDINBURGH, JULY 12 to 15	1
DESHPANDE, V. R., SHARMA, M. L., KHERDIKAR, P. R. AND GREWAL, R. S. SOME OBSERVATIONS ON PECKING IN PIGEONS	7
SCHOTT, A. Suppression of ouabain-induced atrial arrhythmias by carotid sinus stimulation	12
CAVANAGH, J. B., DAVIES, D. R., HOLLAND, P. AND LANCASTER, M. COMPARISON OF THE FUNCTIONAL EFFECTS OF DYFLOS, TRI-0-CRESYL PHOSPHATE AND TRI-p-ETHYLPHENYL PHOSPHATE IN CHICKENS	21
COLLIER, H. O. J., WARNER, B. T. AND SKERRY, RITA. A MULTIPLE TOE-PINCH METHOD FOR TESTING ANALGESIC DRUGS	28
AARSEN, P. N. AND VAN NOORDWIJK, J. THE EFFECT OF ATROPINE, PROPANTHELINE AND POLDINE ON THE VAGALLY STIMULATED GASTRIC MOTILITY AND THE HISTAMINE-STIMULATED ACID GASTRIC SECRETION IN THE RAT	41
GABR, Y. STUDIES ON THE SLOW CONTRACTION OF SMOOTH MUSCLE PRODUCED BY HUMAN PLASMA	51
FRANK, G. B. Effects of drugs on partially and completely denervated skeletal muscle of the frog	59
ACRED, P., BROWN, D. M., TURNER, D. H. AND WRIGHT, D. PHARMACOLOGY	70
OF METHICILLIN	82
PRUSOFF, W. H. Effect of reserpine on the 5-hydroxytryptamine and adenosine-triphosphate of the dog intestinal mucosa	87
BOURA, A. L. A., DUNCOMBE, W. G. AND McCOUBREY, A. THE DISTRIBUTION OF SOME QUATERNARY AMMONIUM SALTS IN THE PERIPHERAL NERVOUS SYSTEM OF CATS IN RELATION TO THE ADRENERGIC BLOCKING ACTION OF BRETYLIUM.	92
CREESE, R., TAYLOR, D. B. AND TILTON, B. RATE OF ANTAGONISM OF TUBOCURARINE BY POTASSIUM IONS	101
NORTHOVER, B. J. AND SUBRAMANIAN, G. ANALGESIC-ANTIPYRETIC DRUGS AS INHIBITORS OF KALLIKREIN	107
BRITTAIN, R. T., COLLIER, H. O. J. and D'ARCY, P. F. THE NEUROMUSCULAR BLOCKING ACTION OF $\gamma$ -OXALOLAUDONIUM BROMIDE	116
BLACKMAN, J. G. AND LAVERTY, R. PERIPHERAL ACTIONS OF HEXAMETHONIUM IN RELATION TO THE DECREASING EFFECTS OF REPEATED DOSES ON THE BLOOD PRESSURE OF ANAESTHETIZED RATS	124
LINDELL, SE. AND VISKE, K. A NOTE ON THE DISTRIBUTION OF [14C]-HISTAMINE ADDED TO BLOOD	131
SPENCER, P. S. J. AND WEST, G. B. SENSITIVITY OF THE HYPERTHYROID AND HYPOTHYROID MOUSE TO HISTAMINE AND 5-HYDROXYTRYPTAMINE.	137
CLEUGH, J., GADDUM, J. H., HOLTON, P. and LEACH, E. Assay of substance P on the fowl rectal caecum	144