

## LETTERS TO THE EDITOR

- Klupp, H. and Kraupp, O. (1954). *Arch. int. Pharmacodyn.*, **98**, 340-354.  
Kraupp, O., Pillat, B., Stormann, H., Bernheimer, H. and Schnetz. (1960). *Ibid.*, **124**, 82-104.  
Robertson, P. A. (1960). *Nature, Lond.*, **186**, 316-317.  
Shanes, A. M. (1958). *Pharmacol. Rev.*, **10**, 59-164, 165-273.

### Tolerance to Tremorine

SIR,—The tremor-producing drug 1,4-dipyrrolidino-2-butyne, Tremorine, is becoming increasingly used in the screening of anti-Parkinsonism substances. In this connection it may be of some interest to record the observation made in this laboratory, that a surprisingly rapid tolerance to tremorine develops in the mouse. The tolerance is easily observed as soon as the third treatment of 6 to 18 mg./kg. intraperitoneally or subcutaneously is given, and is essentially complete after five to six administrations made at two-days intervals. Tolerance comprises all of the three main central effects of the drug, namely, tremor-producing action, analgesic action and anaesthesia-prolonging action. Sensitivity to tremorine returns after discontinuing of drug administration for 2 or 3 weeks.

The property of tremorine to cause tolerance should be taken into account when used in routine pharmacological screening.

L. DECSI.  
M. VÁRSZEGI.  
J. MÉHES.

Institute of Pharmacology,  
Medical University,  
Pécs, Hungary.  
December 5, 1960.

### Antifertility Agents

SIR,—Petrow (1960) has recently proposed the generic term, "claudogens," for steroidal antifertility agents.

This term appears less general, less descriptive, and (to me) less euphonious than the increasing importance of this new class of pharmacologic agents would seem to require. For this reason, I wish to propose the more general, alternative term, "genotropic agent," which has been in use for some time in this laboratory and has met with acceptance by all who have had occasion to use it; in informal usage, "genotropic agent" often becomes simply "genotrope."

The adjective, "genotropic" (soft g), was coined from the Greek roots γενωσ = population (or γενναν = reproductive) and τροπος = changing, affecting, altering. The resulting word expresses precisely what is intended and also conveys the sociologic connotation that is fundamental to the problem of fertility control.

The term, "genotropic," need not imply any specific site, mode, direction, or degree of action by any limited type of agent upon the reproductive process, but requires, for its proper usage, only that the agent in question (steroidal or non-steroidal) have a net effect upon the number of normal progeny produced by an individual of the species under study.

MARTIN L. BLACK.

The Research Laboratories,  
Parke, Davis and Co.,  
Ann Arbor, Michigan, U.S.A.  
December 14, 1960.

### REFERENCE

- Petrow, V. (1960). *J. Pharm. Pharmacol.*, **12**, 704.