H. Oliver for the microanalyses, Miss E. M. Tanner for the optical rotations, and Mrs. P. Varner, Mr. M. D. Stephens, and Miss J. Wax for participation in the biological work.

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New Compounds

Synthesis of New Glycido Derivatives. 2-Dimethylaminoethyl Triphenylglycidate and 2-Dimethylaminoethyl 2,3,3-Triphenylglycidyl Ether

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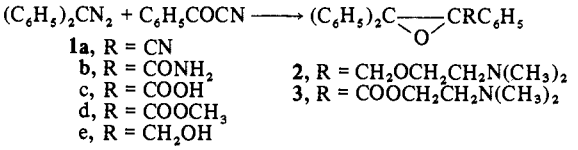
Some time ago[1] one of us described the synthesis of triphenylglycidonitrile and derivatives (**1a–d**). Since many basic alkyl esters of diarylhydroxyacetic acid and many basic alkyl diaryl ethers are endowed with interesting biological activity, it seemed of interest to us to prepare **2** and **3** and to test them for antispasmodic, anticonvulsant, antitussive, analgetic, and antiinflammatory activities.



The title compounds revealed a good antiinflammatory activity not accompanied, however, by an equally good analgetic action. None of the other actions investigated showed anything of interest.

Experimental Section†

Triphenylglycidonitrile (1a), triphenylglycidamide (1b), triphenylglycidic acid (1c), and methyl triphenylglycidate (1d) were prepared as previously described.[1]

2,3,3-Triphenylglycidol (1e). MeOH (10.6 g, 0.33 mole) was added dropwise at −5° into a stirred suspension of LAH (4.4 g, 0.11 mole) in anhyd THF (250 ml). After 15-min stirring, methyl triphenylglycidate (**1d**) (9.1 g, 0.027 mole) was added portionwise. The mixt was stirred at room temp for 3 hr and then moist Et_2O and H_2O were added cautiously. The sepd solid was washed (Et_2O) and the aqueous layer was extd with Et_2O. The combined organic solns were washed (H_2O), dried, and evapd to dryness. The residue was recrystd from ligroin (bp 90–100°) to give **1e** (7.3 g, 87.6% yield) as colorless crystals, mp 104°. *Anal.* ($C_{21}H_{18}O_2$) C, H.

2-Dimethylaminoethyl 2,3,3-Triphenylglycidyl Ether·HCl (2). Finely powdered $NaNH_2$ (13.5 g, 0.34 mole) was added to a soln of **1e** (9.5 g, 0.031 mole) in PhH (95 ml) and the mixt was refluxed for 1 hr with stirring. After cooling to room temp, an 8.77% soln of dimethylaminoethyl bromide (0.04 mole) in PhH was added dropwise. After an addl 1-hr stirring, the mixt was dild with excess Et_2O and then extd with 10% HCl soln. The oil which sepd from the acid soln was extd with $CHCl_3$. The $CHCl_3$ soln was evapd to dryness and the residue was taken up with Et_2O and filtered to give **2** (5.3 g, 41% yield) as a colorless solid, mp 159° dec. *Anal.* ($C_{25}H_{28}ClNO_2$) C, H, Cl, N.

2-Dimethylaminoethyl Triphenylglycidate·HCl (3). Compound **1c** (10 g, 0.031 mole) and dimethylaminoethyl chloride (5.6 g, 0.052 mole) were dissolved in Me_2CHOH (95 ml) and the soln was refluxed for 3 hr. After cooling to room temp, excess H_2O was added to the mixt. The resulting aqueous soln was basified with 10% NaOH soln and the basic material was extd with Et_2O. The Et_2O ext was washed (H_2O) and evapd to dryness to give a waxy product which was converted to a cryst solid by addition of 10% HCl soln. The solid was filtered and recrystd from EtOH–Et_2O to give **3** (6.3 g, 47% yield) as a colorless solid, mp 203° dec. *Anal.* ($C_{25}H_{26}ClNO_3$) C, H, Cl, N.

†Melting points are uncorrected and were taken on a Büchi capillary melting point apparatus. All compounds were analyzed for C, H, N and the analytical results were within ±0.4% of the theoretical value.

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Alkyl Derivatives of Tetrahydroisoquinoline, 1-Phenylpiperazine, and 4-Diphenylmethylpiperidine

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Many useful medicinal compounds[1,2] are based upon the isoquinoline, piperazine,[3,4] and piperidine[5-7] ring systems. As part of a general screening program we have prepared[8] some cyclopropylmethyl and cyclobutylmethyl derivatives of these systems[9] by reduction of the corresponding amides. These compounds show an increasing separation of the aromatic portion of the molecule from the *N*-cycloalkyl group.

Some preliminary screening results on mice, which also include 4-diphenylmethylpiperidine (**3g**, R = H), are presented in Table II. The diphenylmethylpiperidines and phenylpiperazines were found to have a CNS depressant action