in the inoculated medium and incubated at 37° for 48 hr. The resulting cultures were examined microscopically for the presence or absence of motile organisms.

Anthelmintic activity against *Turbatrix aceti* was determined by preparing series of dilutions of the compounds in washed suspensions of the nematodes in distilled H_2O. These preparations were incubated at room temperature for 48 hr and examined for the presence or absence of motile worms.

The quantitative tests with *C. albicans* and *T. mentagrophytes* were run in Sabouraud dextrose agar. The test compounds were dissolved in the hot agar and then diluted serially in test tubes. These were permitted to cool in a vertical position and the test organisms were inoculated onto the surface of the agar. Following a suitable incubation period, the presence or absence of growth was determined by visual inspection.

Quantitative antibacterial tests with *Bacillus subtilis* and *Escherichia coli* were run in nutrient broth. The test compounds were dissolved and diluted serially in preinoculated medium. The preparations were incubated for 24 hr at 37° and then observed grossly for the presence or absence of growth.

New Compounds

Some 3-Alkoxyestra-1,3,5(10)-trien-17β-ols

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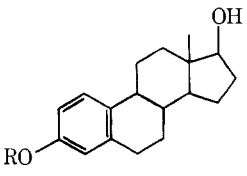
As part of a program[1] directed toward the development of an irreversibly acting analog of 17β-estradiol we have prepared the new 3-alkoxyestra-1,3,5(10)-trien-17β-ols listed in Table I. These compounds possess weak estrogenic activities (at least 0.0001 times as active as 17β-estradiol); however, a number of them inhibit the uptake (*in vitro*) of ^{3}H-17β-estradiol by mouse uteri. Pharmacological results were supplied by M. May and C. Liarokos and will be published in detail elsewhere.

Experimental Section

The compounds described in Table I were prepared, by standard procedures,[2] from 17β-estradiol and the appropriate alkyl halide.

TABLE I

3-ALKOXYESTRA-1,3,5(10)-TRIEN-17β-OLS. PHYSICAL DATA



R	Yield, %	Mp, °C[b]	Crystn[a] solvent	Formula	Analyses[b]
CH_3CH_2	61	124–125[c]	2	$C_{20}H_{28}O_2$	C, H
$CH_3(CH_2)_2$	50	105–106	2	$C_{21}H_{30}O_2$	C, H
$CH_3(CH_2)_3$	31	55–57	1	$C_{22}H_{32}O_2$	C, H
$CH_3(CH_2)_5$	50	76–78	4	$C_{24}H_{36}O_2$	CH
$CH_3(CH_2)_6$	43	68–70	1	$C_{25}H_{38}O_2$	C, H
$(CH_3)_2CH(CH_2)_2$	45	99–100	4	$C_{23}H_{34}O_2$	CH
$HO(CH_2)_3$	25	166–168	6	$C_{21}H_{30}O_3$	C, H
$HO(CH_2)_4$	50	232–233	5	$C_{22}H_{32}O_3$	C, H
$HO(CH_2)_5$	50	150–152	5	$C_{23}H_{34}O_3$	C, H
	42	154–156	4	$C_{28}H_{32}O_3$	C, H
$(CH_3CH_2)_2N(CH_2)_3$	70	222–224	6	$C_{25}H_{39}NO_2 \cdot HCl$	C, H, N
$(CH_3CH_2)_2N(CH_2)_4$	54	211–213	6	$C_{26}H_{41}NO_2 \cdot HCl \cdot H_2O$	C, H, N
$(CH_3CH_2)_2N(CH_2)_5$	25	215–217	7	$C_{27}H_{43}NO_2 \cdot HCl$	C, H, N
$Br(CH_2)_5$	40	79–81	3	$C_{23}H_{39}BrO_2$	C, H, Br

[a] 1, petroleum ether (bp 40–60°); 2, petroleum ether (bp 60–80°); 3, petroleum ether (bp 80–100°); 4, C_6H_{14}; 5, C_6H_6; 6, *i*-PrOH; 7, MeCN. [b] Melting points were recorded on a Thomas–Kofler hot stage and are corrected. Analyses are by Dr. A. E. Bernhardt, Mülheim, Germany. Where analyses are indicated only by symbols of the elements, the analytical results obtained for those elements are within ±0.4% of the theoretical values. [c] R. Courier, L. Velluz, J. J. Alloiteau, and G. Rousseau, *Compt. Rend.*, **139**, 128 (1945), report mp 115° for this compound.

(1) The rationale of our approach is discussed in a previous publication: M. May, B. J. Johnson, D. J. Triggle, J. F. Danielli, and S. S. H. Gilani, *Life Sci.*, **4**, 705 (1965).

(2) (a) N. P. Buu-Hoi, *Bull. Soc. Chim. France*, **12**, 860 (1945); (b) W. J. Hikinbottom, "Reactions of Organic Compounds," Longmans, Green and Co., London, 1957, p. 112.