

表4 Concentrations of some phenols in tobacco smoke (with references^a)

Phenolic compound	Cigarette mainstream smoke - nonfilter ($\mu\text{g}/\text{cigarette}$)	Cigarette sidestream smoke ($\mu\text{g}/\text{cigarette}$)	Cigar smoke ($\mu\text{g}/\text{cigar}$)
<i>Phenols</i>			
Phenol	9-161 (5,6,9,11)	603 (phenols) (7)	35-110 (5,8)
<i>o</i> -Cresol	7-26 (5,6,11)		4-20 (5,8)
<i>m</i> - and <i>p</i> -Cresol	22-82 (5,6,11)		17-90 (5,8)
Xylenols	5-9 (5,11)		1-17 (5,8)
2-, 3- and 4-Vinylphenols	Present (6)		
Ethylphenols	9-28 (5,11)		7-27 (5,8)
2-Methoxyphenol (Guaiacol)	13 (6)		
4-Vinylguaiacol	11 (6)		
1-Naphthol	0.27 (2)		
2-Naphthol	0.54 (2)		
2-Methoxy-4-(2-propenyl)phenol (Eugenol)	2-4 (3,11)		
2-Methoxy-4-propenylphenol (Isoeugenol)	3-15 (3,11)		
Coniferyl alcohol (3'-Hydroxyisoeugenol)	1 (6)		
<i>Di- and trihydroxybenzenes</i>			
Catechol	21-502 (1,4,6,10,11)	88-212 (1)	140-362 (1)
3- and 4-Methylcatechol	32-46 (1,6)		
4-Ethylcatechol	10-46 (1,6)		
4-Vinylcatechol	84 (6)		
Resorcinol	8-80 (2,11)		
Hydroquinone	88-155 (6,11)		
1,3-Dimethoxypropylgallol	Present (11)		

^aReferences: (1) Brunnemann *et al.* (1976b); (2) Commins & Lindsey (1956); (3) Grob & Voellmin (1970); (4) Guerin & Olerich (1976); (5) Hoffmann & Wynder (1972a); (6) Ishiguro *et al.* (1976); (7) Neurath & Ehmke (1964a); (8) Osman *et al.* (1963); (9) Spears (1963); (10) Waltz *et al.* (1965); Wynder & Hoffmann (1967)

表5 Concentrations of free fatty acids in cigarette smoke^a

Acid	Tobacco burned ($\mu\text{g}/\text{g}$)				
	Oriental	Flue-cured	Maryland	Burley	Blend ^b
Palmitic	284	197	107	55	152
Stearic	90	74	43	33	75
Oleic	108	39	32	21	58
Linoleic	146	113	52	50	96
Linolenic	329	310	66	52	240
Total (mg)	0.96	0.73	0.30	0.21	0.62
Wet TPM ^c (mg)	37.2	37.6	26.4	20.1	32.3
% Fatty acids in wet TPM	2.6	1.95	1.14	1.05	1.9

^aFrom Hoffmann and Woziwodzki (1968). Cigarettes were 85 mm long without filter tips.

^bUS commercial cigarette

^cTPM, total particulate matter