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HEXABROMIDES OF GLYCERIDES AND FATTY ACIDS.

By John Walker and George Warburton.

(*Read at the Meeting, April* 9, 1902.)

In a paper by Hehner and Mitchell, published in the Analyst of December, 1898, there is given a convenient method for the determination of the hexabromides obtainable from oils and their fatty acids. This was accompanied by some figures obtained by the authors in the course of their investigations.

The following table may be of value to those interested in the subject, particularly as some of the figures given refer to oils not hitherto examined in this direction:

Kind of Oil.	Per Cent. Yield of Hexabromide from Glyceride of Fatty Acids.		Per Cent. Yield of Hexabromide from Fatty Acids.		
Japan fish	21·14	22·07	23·04		23·32
Newfoundland cod ...	32·68	30·62	39·1		37·76
Shark-liver	21·22	19·08	12·68		15·08
Genuine cod-liver ...	35·33	33·76	29·86		30·36
Deodorized fish	49·01	52·28	38·42		39·27
Sperm	2·61	2·42	2·05		—
,, ...	3·72	3·69 (stood 48 hours)	—		—
Whale	15·54	16·14	12·38		12·44
Seal	27·54	27·92	19·83		19·93
Rape	—	—	2·44		3·38
Linseed (iodine value 184)	—	—	31·31	30·44	30·80
Liquid acids (iodine value 208)	—	—	34·9		—
Linseed (iodine value 181)	23·14	23·52	29·06		29·34
Candle-nut	8·21	7·28	11·53	11·23	12·63
Chinese-wood (1st sample)	0·38	0·39	—		—
,, ,, (2nd sample)	none		—		—
Safflower	—	—	1·65		0·65

The work was carried out in the laboratory of Dr. Lewkowitsch.

Discussion.

Mr. Hehner inquired whether Dr. Lewkowitsch (who read the paper in the absence of the authors) could explain why, in some cases, the fatty acids yielded so much smaller percentages of hexabromide than the glycerides.

Mr. C. A. Mitchell said that since the paper by Mr. Hehner and himself, to which reference had been made, he had examined a large number of linseed oils, and almost without exception the quantity of hexabromide yielded was from 23 to 25 per cent. In one case 42 per cent. had been obtained, but he did not know the origin of the oil. He had not been able to reduce the compound, even after treatment with zinc for several hours.

Dr. Lewkowitsch said that the point referred to by Mr. Hehner was a somewhat curious one, and required explanation. He was not himself responsible for the figures, which were simply given as they were obtained in the actual experiments. The collection, however, of individual figures such as these could not but tend to an increase of knowledge in regard to the individual oils concerned.