TABLE 1

The mean angular retardation of light, of wavelength 542 mμ, through living L. bulgaricus *from 14 different cultures mounted in 0·25% NaCl, and their mean thicknesses calculated therefrom.*

Culture no.	*Date of culture and subcultures*	*Date of examination*	*Mean retardation (ϕ_1) from 10 measurements on different bacilli*	*Mean thickness (t)*
Measurements with the 2-mm double-focus objective:				
			(degrees)	*(μ)*
1	11/7	20/7	55·8	1·21
2	11/7, sub. 16/7	21/7	56·4	1·23
3	11/7, sub. 16/7 and 24/7	27/7	52·6	1·14
4	25/7	28/7	52·8	1·14
5	25/7	29/7	53·2	1·15
6	25/7, sub. 27/7	29/7	52·2	1·13
7	25/7, sub. 27/7	29/7	53·6	1·16
8	25/7, sub. 27/7	29/7	52·0	1·13
9	25/7, sub. 27/7	30/7	52·4	1·14
10	25/7, sub. 27/7	30/7	53·6	1·16
Measurements with the 2-mm shearing objective:				
11	11/7, sub. 16/7	21/7	54·6	1·19
12	11/7, sub. 16/7 and 24/7	27/7	56·8	1·23
13	25/7	28/7	52·6	1·14
14	25/7	29/7	54·2	1·18