THE WORK OF THE CHEMICAL LABORATORY OF THE DE-PARTMENT OF HEALTH DURING THE YEAR 1924-1925

This Laboratory has rendered valuable service during the last fiscal year in the interests of public health, and a detailed account of work done regarding the analysis of adulterated milk is presented.

The total number of samples examined during the year was 4,076, which are classified as follows:

Excellent 703	Good 1.458	Fair 864	Inferior 171
Suspicious 26	Non-classified	ı ejected	Adulterated 500
Poor 144	Negative 18	Positive 28	

Of the 4,076 samples examined, 2,883 were of cow's milk, which are classified in the following table:

Excellent		Good		Fair	Inferior
	702		730	826	139
Suspicious	24	Non-classified	136	Rejected	Adulterated * 326

^{*} Percentage of adulteration, 11.31.

The adulteration of cow's milk this year has been reduced considerably having fallen to 11.31 per cent, the lowest cipher obtained in 24 years. This reduction is probably due to the two following reasons: 1st, to the steady and intense campaign which is being carried on in the prosecution of offenders; 2nd, to the use of powdered skimmed milk for the adulteration of cow's milk. This adulteration with diluted powdered skimmed milk complicates the interpretation of the analyses seriously as the data obtained as a result of same is very similar to the accepted standard. The analyst is for this reason forced to include the specimen in those classified as inferior or fair, increasing these two groups at the expense of the group adulterated with water alone. This very serious problem has been solved by the new milk law recently approved by the Leg-

islature, which among other things, provides that all powdered skimmed milk sold or used in Porto Rico as cattle feed shall be duly colored with artificial certified coloring material in order to prevent its fraudulent use in the adulteration of milk for human consumption.

The following chart gives a statistical report of milk adulteration from 1901 in order to demonstrate the results obtained from the work carried out during the last 24 years:

1901-02	25.00	per	cent
1902-03	20.70	per	cent
1903-04	23.80	per	cent
1904-05	25. 80	per	cent
1905-06	28.70	per	cent
1906-07	37.00	per	cent
1907-08	25. 00	per	cent
1908-09	23.40	per	cent
1909-10	21.30	per	cent
1910-11	50.50	per	cent *
1911-12	26.60	per	cent
1912-13	20.60	per	cent
1913-14	11.90	per	cent
1914-15	21. 20	per	cent
1015-16	19.90	per	cent
1916-17	21.60	per	cent
1917-18	22.50	per	cent
1918-19	26.30	per	cent
1919-20		-	
1920-21	24, 12	per	cent
1921-22		-	
1922-23	20.95	per	cent
1923-24			
1924-25	11.31	per	cent

^{*} New law approved.

Table Showing Number of Samples of Cow's Milk Analyzed, Number Adulterated and Percentage of Adulteration

Aguas Buenas. Albonito Arecibo Barreloneta Barranquitas Barranduitas Barranduitas Barra	Towns	Total	Adulte- rated	Percen- tage
Aguas Buenas. Albonito Arecibo Barreloneta Barranquitas Barranduitas Barranduitas Barra	Aguada	16		18.75
Aibasco	Aguadilla		6	5.00
Añasco 40 7 17 Arceibo 135 10 7 Arroyo 25 2 8 Barceloneta 22 4 18 Barranquitas 3 1 33 1 33 1 33 1 33 1 33 1 33 1 33 1 33 1 33 1 33 1 33 1 33 1 33 1 33 1 33 1 33 1 32 10 60 10 10 20 60 60 60 60 60 60 60 60 60 60 60 60 60 <td>Albonito</td> <td>4</td> <td></td> <td></td>	Albonito	4		
Arroyo Barceloneta Barceloneta Barceloneta Barranquitas Barros Barro	15000		7	17.50
Barceloneta 22 4 188 Barranyultas 3 1 3 3 1 33 Barros 9 1 1 11 Bayamóu 229 2 6 6 Cabo Kojo 37 10 22 Caguas 108 18 16 Camuly 59	Arroyo	25	2	7.41 8.00
Barros	Parcelonets			18.18 33.33
Camulty 59 Catafaño 43 4 9 Cataño 43 4 29 6 6 8 2 14 3 21 2 6 6 8 3 9 1 2 2 3 8 0 0 3 9 1 2 2 3 3 0 0 2 2 3 3 0 0 0 1 2 2 3 3 0 0 2 2 3 3 0 0 0 1 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 4 2 1 1 2 3 2 4 2 1 1 4 2 3 1 2 2 3 3 1 3 3 1 3 3 1 3 3 <td>Rarros</td> <td>9</td> <td>1</td> <td>11.11</td>	Rarros	9	1	11.11
Camulty 59 Catafaño 43 4 9 Cataño 43 4 29 6 6 8 2 14 3 21 2 6 6 8 3 9 1 2 2 3 8 0 0 3 9 1 2 2 3 3 0 0 2 2 3 3 0 0 0 1 2 2 3 3 0 0 2 2 3 3 0 0 0 1 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 4 2 1 1 2 3 2 4 2 1 1 4 2 3 1 2 2 3 3 1 3 3 1 3 3 1 3 3 <td>Claha Kaja</td> <td></td> <td></td> <td>6.90</td>	Claha Kaja			6.90
Camulty 59 Catafaño 43 4 9 Cataño 43 4 29 6 6 8 2 14 3 21 2 6 6 8 3 9 1 2 2 3 8 0 0 3 9 1 2 2 3 3 0 0 2 2 3 3 0 0 0 1 2 2 3 3 0 0 2 2 3 3 0 0 0 1 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 4 2 1 1 2 3 2 4 2 1 1 4 2 3 1 2 2 3 3 1 3 3 1 3 3 1 3 3 <td>Carries</td> <td>108</td> <td></td> <td>16,66</td>	Carries	108		16,66
Gataño 418 4 9 2 Claies 6 6 Comerio 13 5 38 20 Comerio 3 4 2 2 1 4 4 1 2 2 4	Caroling	59		
Ciales 6 Comerio 13 5 38 Corozal 3 3 Dorado 3 3 Pajardo 39 1 2 2 1 2 1 2 1 2 1 2 1 4 1 5 1 5 1 5 1 5 1 6 1 2 3 4 2 4 <	Cataño	1 43		9,30
Comerio 13 5 38 Corozal 3 3 1 2 2 1 2 1 2 1 2 1 2 1 4 1 2 1 4 1 5 1 5 1 5 1 6 1 2 3 4 1 6 1 2 3 4 4 1 6 1 2 3 4 4 4 8 19 1 2 2 1 4 4 1 8 19 1 3 18 19 1 3 18 19 1 3 18 19 1 3 18 19 1 3 18 19 1 3 18 19 1 3 18 19 1 3 18 19 1 3 18 19 1 3 18 18 12 18	Cialas			21.43
Dorado	Comeriu	13	5	38.46
Fajardo	Corozal			
Guánlea 2 3 Guayama 61 2 3 Gurabo 15 1 6 Hatillo 22 1 4 Hambel 42 8 19 Isabela 8 1 12 Jayuya 16 3 18 Juncos 23 8 34 Lajas 22 1 1 Las Pledras 17 1 5 Las Narias 12 2 16 Las Pledras 7 1 14 10 1	Fajardo	39	1	2.56
Gurabo	Guanica			3.27
Hamacao	Gurabo	15	1	6,66
Juanco 22 3 8 34 34 34 34 34 34	Hatillo		1	4.54 10 04
Juanco 22 3 8 34 34 34 34 34 34	Isabela	8	1	12,50
Juncos 23	Jayuya	16	3	18.75
Lares	Juncos	23	8	34,78
Las Marías 12 2 16 Las Piedras 7 1 14 Lolza 11 1 9 Manatí 30 1 3 Maricao 1 1 1 Mayagúez 227 54 23 Moca 20 2 10 Morovis 16 3 18 Naguabo 8 8 8 Naranjito 8 8 2 Patilias 2 21 1 4 Vio Grande 8 2 2 1 Quebradillas 21 1 4 Kio Piedras 21 1 4 Kio Grande 8 2 2 Rio Piedras 45 5 11 Sabana Grande 28 3 10 Salinas 16 3 10 Salinas 16 3 10 San Juan 652 41 6 San Lorenzo 29 15 51 Santa Isabel 4 1 2 Toa Alta 11 2 18 Utuado 30 5 16 </td <td>Lajas</td> <td></td> <td></td> <td>8.33 5.88</td>	Lajas			8.33 5.88
Loiza	Las Marias	12	2	16.66
Manati 30 1 3 Maricao 1 3 3 1 3 Mayagüez 227 54 23 16 227 54 23 16 3 18 <td>Las Piedras</td> <td></td> <td>1</td> <td>14.28 9.09</td>	Las Piedras		1	14.28 9.09
Mayagüez 227 51 23 Moca 20 2 10 Morovis 16 3 18 Naguabo 8 8 8 Naranjito 8 8 9 Patillas 2 21 1 4 Roce 303 21 6 6 Quebradillas 21 1 4 4 4 6 Rio Pledras 45 5 5 11 5 1 3 1 6 1 2 2 15 5 1 1 2 1 4 4 1 2 1 4 1 2 1 4 1 2 1 4 1 2 1 4 1 2 1 4 1 2 1 4 1 2 1 4 1 2 1 4 1 2 1 4 1 2 1 4 1 2 1 4 1 2 1 4 1 2 1 4 1 2 1 2 1 2 1 2 1 1 2 1 2<	Manati	30		3,33
Moca 20 2 100		227		23,78
Naguabo 8 Naranjito 8 Patillas 2 Ponce 303 Quebradilias 21 1 Kio Grande 8 2 25 Rio Piedras 45 5 11 Sabana Grande 28 3 10 Salinas 16 8 18 25 San Germán 68 18 25 San Juan 652 41 6 San Sebastián 22 15 51 San Sebastián 22 10 45 Santa Isabel 4 11 2 18 Utuado 30 5 16 Vega Baja 5 9 1 11 2 18 Vieques 9 1 11 2 18 District No. 1 (A) 12 11 2 10 12 11 2 12 12 11 12 11 12 11 12 11 12 11 12 12 12 </td <td>Moca</td> <td>20</td> <td>2</td> <td>10.00</td>	Moca	20	2	10.00
Naranjito 8 Patillas 2 Ponce 303 21 6 Quebradilias 21 1 4 1 25 Rio Grande 8 2 25 Rio Pledras 45 5 11 Sabana Grande 28 3 10 Sallnas 16 8 8 San Germán 68 18 25 San Juan 652 41 6 San Lorenzo 29 15 51 San Sebastián 22 10 45 Sauta Isabel 4 22 10 45 Sauta Isabel 4 11 2 18 Utuado 30 5 16 Vega Baja 5 11 2 Vieques 9 1 11 2 Yauco 50 1 2 District No. 1 (A) 12 District No. 2 (B) 4 1 25 District No. 2 (B) 9 3 3 District No. 4 (B) 4 1 25 District No. 4 (B) 4 23 3 District No. 4 (B) <t< td=""><td>Morovis</td><td></td><td>3</td><td>18.75</td></t<>	Morovis		3	18.75
Ponc	Naranjito	8		
Quebradillas 21 1 4 Río Grande 8 2 25 Río Pledras 45 5 11 Sabana Grande 28 3 10 Salinas 16 San Germán 68 18 26 San Juan 652 41 6. San Lorenzo 29 15 51 Santa Sebastián 22 10 45 Santa Isabel 4 11 2 18 Toa Alta 11 2 18 Utuado 30 5 16 Vega Baja 5 1 2. Vieques 9 1 11 2 Yauco 50 1 2. District No. 1 (A) 12 District No. 2 (B) 4 1 25. District No. 2 (B) 94 3 3 District No. 4 (B) 34 8 23. District No. 5 (B) 5 5 12 District No. 4 (B) 3 3 3 District No. 5 (B) 4 1 25. District No. 4 (B) 3 3 3			91	6,90
Rio Piedras 45 5 11 Sabana Grande 28 3 10 Salinas 16 12 San Germán 68 18 22 San Juan 652 41 6 San Lorenzo 29 15 51 San Sebastián 22 10 45 Sauta Isabel 4 11 2 18 Utuado 30 5 16 Vega Baja 5 5 11 Vieques 9 1 11 2 Yauco 50 1 2 0 District No. 1 (A) 12 District No. 2 (A) 9 1 11 2 1	Quebradillas	21	1	4.76
Salinas 16 San Germán 68 18 25 San Juan 652 41 6 San Lorenzo 29 15 51 San Sebastián 22 10 45 Santa Isabel 4 11 2 18 Utuado 30 5 16 Vega Baja 5 9 1 11 Yabucoa 9 1 11 2 Yauco 50 1 2 District No. 1 (A) 12 11 12 District No. 1 (B) 4 1 25 District No. 2 94 3 3 District No. 4 94 3 3 District No. 4 34 8 23 District No. 5 50 17 27	Río Grande	8		25.00
Salinas 16 San Germán 68 18 25 San Juan 652 41 6 San Lorenzo 29 15 51 San Sebastián 22 10 45 Santa Isabel 4 11 2 18 Utuado 30 5 16 Vega Baja 5 9 1 11 Yabucoa 9 1 11 2 Yauco 50 1 2 District No. 1 (A) 12 11 12 District No. 1 (B) 4 1 25 District No. 2 94 3 3 District No. 4 94 3 3 District No. 4 34 8 23 District No. 5 50 17 27	Sabana Grande	28	3	11.11 10.71
San Juan 652 41 6. San Lorenzo 29 15 51 San Sebastián 22 10 45 Santa Isabel 4 11 2 18 Utnado 30 5 16 Vega Baja 5 9 1 11 Yabucoa 9 1 11 Yauco 50 1 2.0 Food and Drugs Inspectors District No. 1 (A) 12 12 District No. 1 (B) 4 1 25.0 District No. 2. 9 4 1 25.0 District No. 3. 94 3 3. District No. 4. 34 8 23. District No. 5 62 17 27	Salinas		19	26,47
San Sebastián 22 10 45 Santa Isabel 4 4 11 2 18 Toa Alta 11 2 18 15 16 16 16 16 18 11 2 18 11 2 18 16 18 12 18 12	San Juan	652	41	6.29
Santa Isabel 4 Toa Alta 11 Utnado 30 Vega Baja 5 Vieques 9 Yabucoa 3 Yauco 50 1 1.2 District No. 1 (A) 12 District No. 2 9 District No. 3 94 District No. 4 3 District No. 4 3 District No. 4 34 Bistrict No. 4 34 Bistrict No. 4 34 Bistrict No. 5 52 Bistrict No. 5 52 17 27 Bistrict No. 5 52 17 27	San Lorenzo			51.72 45.45
Utuado. 30 5 16. Vega Baja. 5 5 1 11. Yabucoa. 9 1 11. 11. 11. 11. 11. 12. <t< td=""><td>Santa Isabel</td><td>4</td><td></td><td></td></t<>	Santa Isabel	4		
Vegues 9 1 11. Yabucoa 3 1 2.6 Yauco 50 1 2.6 District No. 1 (A) 12 District No. 1 (B) 4 1 25.6 District No. 2 94 3 3. District No. 3 94 3 3. District No. 4 34 8 23. District No. 5 52 17 27.	Utuedo			18.18
Tableton	Vega Baja	5		
Yauco 50 1 2.0	Vieques		1	11,11
District No. 1 (A)			·····i	2.00
District No. 2 9	Food and Drugs Inspectors			
District No. 2 9	District No. 1 (A)			
District No. 3 94 3 3 3 3 3 3 3 3 3	District No. 1 (B)	9	1	25,00
District No. 5	District No. 3	94	3	3,19
William 12 - 12 - 12 - 12 - 12 - 12 - 12 - 12	District No. 5			23.52 27.42
District No. 6	Quarentine Hospital	32	4	12.50
Totals	Totals	2,883	326	11.31