

and other chemists who have made a special study of gluten and its compounds, that the bread-making value of a flour depends not only upon the amount of gluten present, but also upon the proportion of gliadin to glutenin. Professor Snyder (Minnesota Experiment Station) says: 'Either an excessive or scant amount of gliadin may cause a flour to have poor bread-making qualities.' As regards tentative standards this writer further says that: 'Flour of good quality should contain about 11 per cent protein ($N \times 5.7$) and that from 55 to 65 per cent should be in the form of gliadin.' (Journal

ANALYSES OF FLOURS.

Designation of Samples.	Moisture.	Protein or Albumin- oids, ($N \times 5.7$)	Fat.	Carbo- hydrates.	Fibre.	Ash.
	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.
No. 1 Hard	8.53	10.77	1.16	78.83	.13	.58
No. 1 Northern	8.83	11.00	1.58	77.57	.44	.58
No. 2 "	8.75	10.77	1.43	78.02	.44	.59
No. 3 "	8.42	11.30	1.57	77.41	.50	.80
No. 4 Extra	8.38	11.17	1.62	77.78	.41	.61
No. 4 "	8.60	11.00	1.60	78.06	.07	.67
No. 5 "	8.51	10.89	1.43	78.28	.19	.67
Feed	8.14	11.12	1.95	77.52	.51	.76
No. 2 Feed	8.59	11.34	1.43	77.42	.23	.99
No. 5 Frosted	9.15	11.23	1.49	77.24	.16	.73

Designation of Samples.	Gliadin. ($N \times 5.7$)	Percentage of Protein in the form of Gliadin.	Gluten.			Acidity.
			Wet.	Dry.	Ratio of Dry to Wet.	
	p. c.	p. c.	p. c.	p. c.		p. c.
No. 1 Hard	4.85	45.0	37.56	13.60	2.88	.15
No. 1 Northern	4.90	44.5	31.01	13.48	2.89	.15
No. 2 "	4.85	45.0	35.31	12.64	2.79	.15
No. 3 "	4.73	41.8	36.44	12.81	2.89	.16
No. 4 Extra	4.85	43.4	36.02	12.68	2.84	.15
No. 4 "	4.85	44.1	36.90	12.61	2.89	.16
No. 5 "	4.79	43.9	35.86	12.31	2.91	.17
Feed	4.67	41.9	36.40	12.61	2.88	.24
No. 2 Feed	4.33	38.1	31.89	11.35	2.80	.41
No. 5 Frosted	4.90	43.6	38.16	13.30	2.87	.22

of American Chemical Society, March, 1904). It would, however, appear from more recent work that there is ample reason to believe that in many good flours the proportion of gliadin is considerably less than here stated. Thus, from bulletin No. 90, Minn. Exp. Sta., issued January, 1905, by Prof. Snyder, in which the analyses of flours are given from 10 standard grades of wheat of 1904 (Minnesota inspection) I obtain, partly by calculation, the following results: