Table IV

The number of cows and the percentage of their quarters with mastitis (M) and secretion disturbance (S) per lactation number for the breeds DF (Dutch Friesian) and DRW (Dutch Red and White).

lactation number	percentage quarters M + S DF breed	DRW breed	difference in M + S rate
1	15.3	17.9	+ 2.6
2	22.2	26.2	+ 4.0
3	26.1	30.8	+ 4.7
4	31.7	39.4	+ 7.7
5	32.7	42.0	+ 9.3
6	32.5	47.5	+ 15.0
7	39.1	50.6	+ 11.5
8	33.1	48.9	+ 15.8
9	37.0	47.3	+ 10.3
9	39.9	51.3	+ 11.4
total average	25.5	30.3	+ 4.8
No. quarters	29408	11894	

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Investigations on the Ability of Cattle to Distinguish Colours

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Summary

The subject of this paper is an investigation of colour perception in cattle. The six young bulls available for the tests were first trained on the colour green. In this, and in the ensuing tests, the animals were offered three feeding boxes, one marked with a colour card and two with grey cards. The animals had to find and open the box marked with the colour and, upon so doing were rewarded with food. The coloured and grey cards were systematically exchanged before each test. Each of the colours red, yellow, medium blue, green and light blue were tested in combination with six grey shades within the same range of intensity.

The test results showed significantly that red, yellow, green and light blue could be distinguished from grey, thus demonstrating that cattle possess colour vision. Only two animals could differentiate between medium blue and the corresponding grey shades. In the case of the remaining animals the results were inconclusive in this point.

In further tests the animals were offered various combinations of colours without corresponding grey shades. A preference for yellow and green to red, light blue and medium blue was established. These results provide additional evidence of colour perception in cattle.