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Supplementary material

Genome-wide association study for heat stress resistance in Brown Swiss cattle in Yucatan, Mexico

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Supplementary material

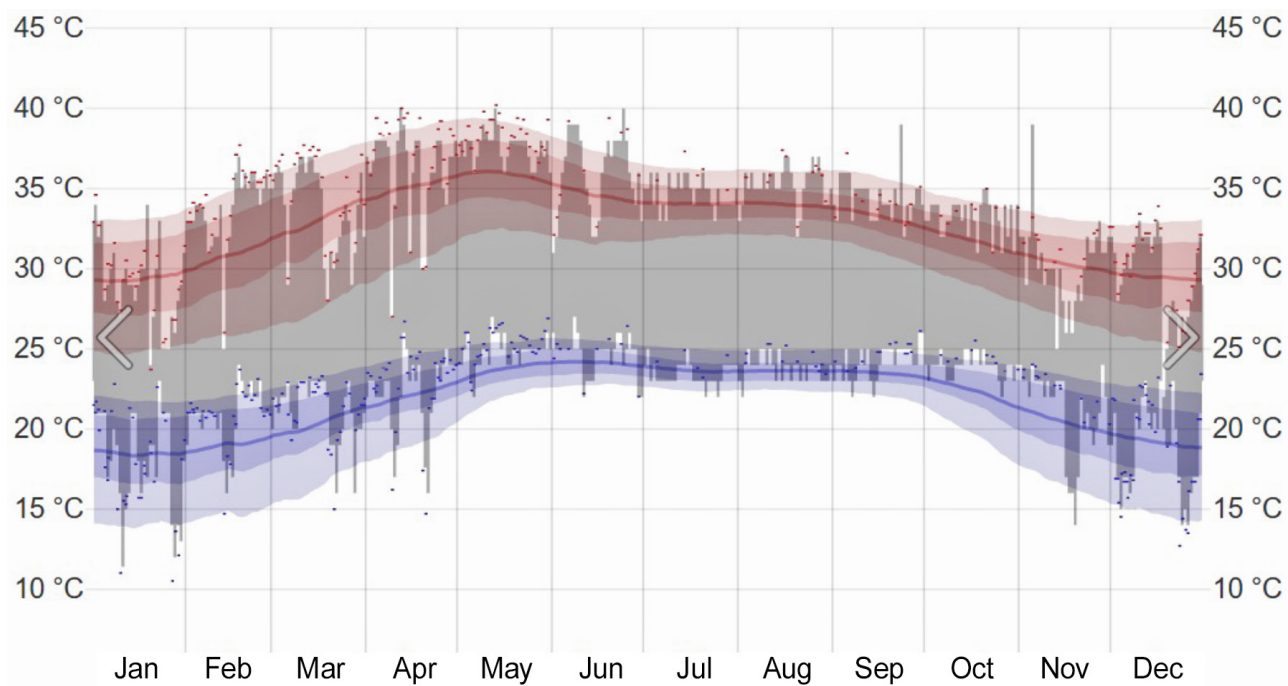


Figure S1A. Monthly minimum and maximum temperatures recorded in the community of the port of Progreso, Mérida, Yucatán in 2019

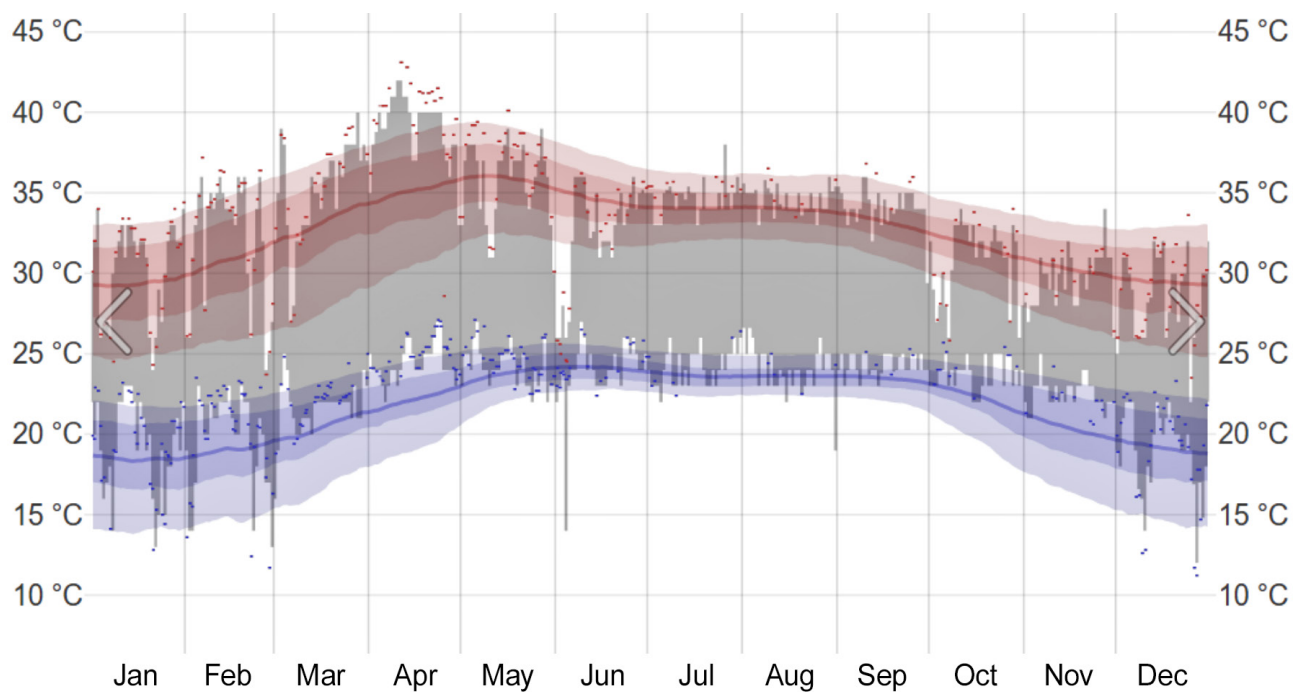


Figure S1B. Monthly minimum and maximum temperatures recorded in the community of the port of Progreso, Mérida, Yucatán in for 2020

Supplementary material

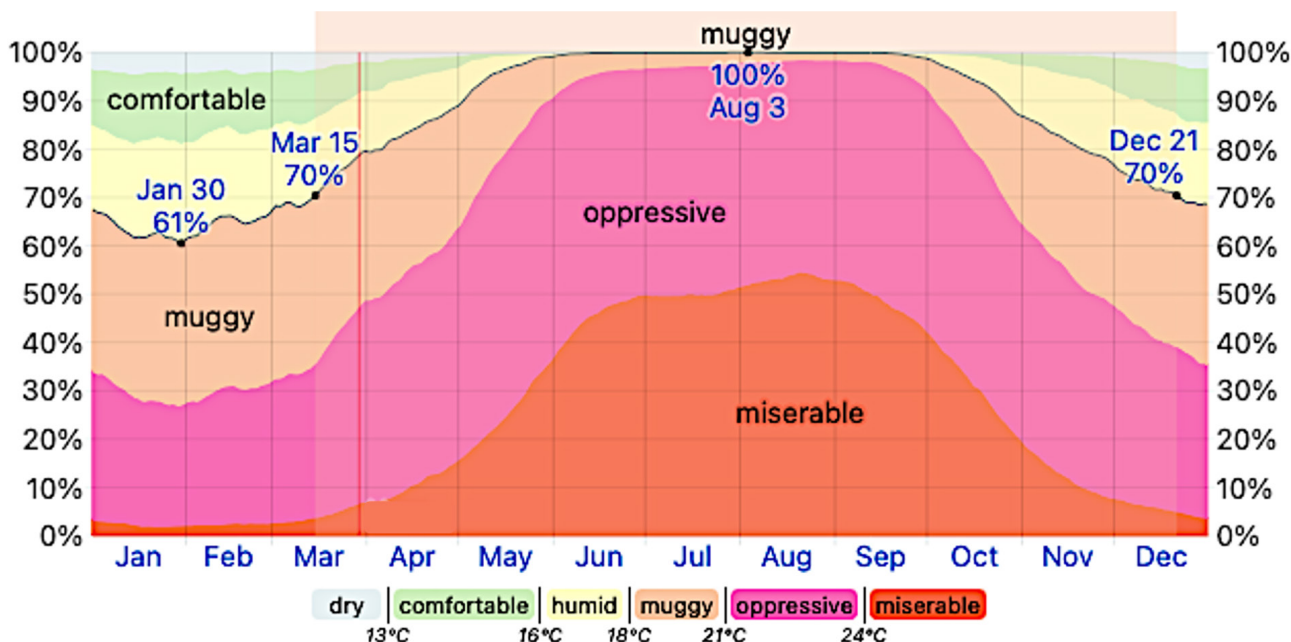


Figure S2. Average relative humidity recorded in the community of the port of Progreso, Merida, Yucatan in 2019 and 2020

Table S1. Classification of heat stress according to the temperature humidity index (THI) in the herd studied located in the port of Progreso, Merida, Yucatan

HR/ T (°C)	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
37	62	63	64	65	66	68	69	70	71	72	73	75	76	77	78	79	81	82	83	84	85	86	88
38	62	63	64	65	66	68	69	70	71	72	74	75	76	77	78	80	81	82	83	84	85	87	88
39	62	63	64	65	67	68	69	70	71	73	74	75	76	77	79	80	81	82	83	85	86	87	88
40	62	63	64	65	67	68	69	70	71	73	74	75	76	77	79	80	81	82	84	85	86	87	88
41	62	63	64	65	67	68	69	70	72	73	74	75	76	78	79	80	81	83	84	85	86	87	89
42	62	63	64	66	67	68	69	70	72	73	74	75	77	78	79	80	81	83	84	85	86	88	89
43	62	63	64	66	67	68	69	71	72	73	74	75	77	78	79	80	82	83	84	85	87	88	89
44	62	63	64	66	67	68	69	71	72	73	74	76	77	78	79	81	82	83	84	86	87	88	89
45	62	63	64	66	67	68	69	71	72	73	75	76	77	78	80	81	82	83	85	86	87	88	90
46	62	63	65	66	67	68	70	71	72	73	75	76	77	78	80	81	82	84	85	86	87	89	90
47	62	63	65	66	67	68	70	71	72	74	75	76	77	79	80	81	82	84	85	86	88	89	90
48	62	63	65	66	67	68	70	71	72	74	75	76	77	79	80	81	83	84	85	86	88	89	90
49	62	63	65	66	67	69	70	71	72	74	75	76	78	79	80	82	83	84	85	87	88	89	91
50	62	63	65	66	67	69	70	71	73	74	75	76	78	79	80	82	83	84	86	87	88	90	91
51	62	63	65	66	67	69	70	71	73	74	75	77	78	79	81	82	83	85	86	87	88	90	91
52	62	64	65	66	67	69	70	71	73	74	75	77	78	79	81	82	83	85	86	87	89	90	91
53	62	64	65	66	68	69	70	72	73	74	76	77	78	80	81	82	84	85	86	88	89	90	92
54	62	64	65	66	68	69	70	72	73	74	76	77	78	80	81	82	84	85	86	88	89	90	92
55	62	64	65	66	68	69	70	72	73	74	76	77	79	80	81	83	84	85	87	88	89	91	92

The columns indicate the ambient relative humidity (%) and the rows, the ambient temperature (°C). The green color indicates the absence of stress (THI < 72 units); the yellow color indicates the beginning of stress to a moderate one (72 < THI < 78 units); the orange color indicates severe stress (79 ≤ THI < 88 units) and, the red color indicates stress that can cause death (89 ≤ THI ≤ 99 units).