

Supplementary Table S4. Mean colour values of meat pieces from thigh area (standard deviation in parenthesis).

Lot	Storage (Days)	Treatment											Sig.
		Co	Ch	Ch + Or	Ch + Va	Ch + Or + Va	Va	Al	Al + Or	Al + Va	Al + Or + Va	Al + Ol + Va	
L*	0	42.14 (1.45) ^{Ab}	42.14 (1.45) ^{Ab}	42.14 (1.45) ^{Ab}	42.14 (1.45) ^{Aa}	42.14 (1.45) ^{Ac}	42.14 (1.45) ^{Ac}	42.14 (1.45) ^{Ac}	42.14 (1.45) ^{Ac}	42.14 (1.45) ^{Ac}	42.14 (1.45) ^{Ab}	42.14 (1.45) ^{Abc}	NS
	1	47.40 (2.40) ^{EFc}	42.10 (0.50) ^{D_{bc}}	49.17 (0.94) ^{F_d}	46.70 (0.02) ^{E_b}	37.16 (0.20) ^{Aa}	38.10 (0.70) ^{AB_b}	37.30 (0.69) ^{A_{ab}}	40.80 (0.45) ^{CD_{bc}}	40.03 (0.03) ^{BC_b}	41.26 (0.35) ^{CD_b}	40.46 (0.12) ^{CD_b}	***
	3	37.77 (0.38) ^{CD_a}	44.21 (0.14) ^{F_{bc}}	41.85 (0.62) ^{E_b}	49.18 (0.86) ^{G_b}	55.19 (0.48) ^{H_d}	38.28 (1.23) ^{D_b}	35.08 (0.89) ^{B_a}	35.31 (1.64) ^{B_a}	33.15 (0.30) ^{A_a}	36.28 (0.43) ^{BC_a}	43.23 (0.25) ^{EF_{bc}}	***
	7	41.59 (1.27) ^{C_b}	44.25 (0.88) ^{DE_c}	38.72 (0.07) ^{AB_a}	46.32 (0.14) ^{E_b}	37.97 (0.70) ^{AB_{ab}}	40.51 (0.54) ^{BC_{bc}}	37.10 (1.40) ^{A_{ab}}	42.60 (0.20) ^{CD_c}	38.50 (0.01) ^{AB_b}	38.40 (1.96) ^{AB_a}	49.18 (1.85) ^{F_d}	***
	14	46.29 (0.11) ^{E_c}	39.39 (0.19) ^{B_a}	38.48 (0.31) ^{AB_a}	48.17 (1.91) ^{CD_a}	36.47 (0.13) ^{Aa}	42.86 (0.55) ^{D_c}	51.72 (1.95) ^{F_d}	38.41 (1.01) ^{AB_b}	40.37 (1.05) ^{BC_{bc}}	43.46 (0.04) ^{D_b}	43.35 (1.13) ^{D_c}	***
	21	41.70 (0.06) ^{FG_b}	43.12 (0.84) ^{GH_{bc}}	44.05 (0.2) ^{H_c}	40.43 (1.65) ^{DE_{Fa}}	39.88 (1.65) ^{DE_{Fbc}}	35.18 (0.98) ^{A_a}	38.69 (0.07) ^{CD_b}	41.07 (0.05) ^{EF_c}	39.29 (0.59) ^{CDE_b}	37.68 (0.57) ^{BC_a}	35.83 (0.43) ^{AB_a}	***
Sig.		***	**	***	***	***	***	***	***	***	***	***	
a*	0	22.62 (0.22) ^{Ad}	22.62 (0.22) ^{Ac}	22.62 (0.22) ^{Af}	22.62 (0.22) ^{Ae}	22.62 (0.22) ^{Ae}	22.62 (0.22) ^{Ac}	22.62 (0.22) ^{Ad}	22.62 (0.22) ^{Ac}	22.62 (0.22) ^{Ac}	22.62 (0.22) ^{Ab}	22.62 (0.22) ^{Ac}	NS
	1	16.61 (0.03) ^{Aa}	20.17 (0.73) ^{D_b}	17.00 (0.45) ^{Ac}	17.34 (0.32) ^{AB_c}	18.83 (0.11) ^{C_c}	18.21 (0.12) ^{BC_{ab}}	22.8 (0.02) ^{E_d}	22.28 (0.19) ^{E_{bc}}	21.14 (0.05) ^{D_b}	22.68 (0.94) ^{E_b}	17.33 (0.56) ^{AB_a}	***
	3	20.66 (0.41) ^{DEF_c}	21.22 (0.36) ^{EF_b}	21.91 (0.28) ^{FG_e}	25.92 (0.03) ^{H_f}	9.78 (0.07) ^{Aa}	18.46 (0.67) ^{BC_{ab}}	16.33 (0.68) ^{B_a}	18.75 (2.78) ^{CD_{ab}}	17.74 (0.61) ^{BC_a}	23.73 (0.18) ^{G_b}	19.53 (0.16) ^{CDE_{ab}}	***
	7	16.72 (0.38) ^{Aa}	20.27 (0.95) ^{BCDE_b}	18.17 (0.24) ^{AB_d}	21.69 (0.16) ^{DE_d}	18.60 (0.42) ^{ABC_c}	19.53 (0.21) ^{BCD_b}	20.61 (0.77) ^{CDE_c}	18.02 (1.38) ^{AB_a}	20.70 (0.04) ^{CDE_b}	22.02 (1.80) ^{E_b}	21.05 (2.02) ^{CDE_{bc}}	*
	14	19.75 (0.22) ^{D_b}	13.43 (0.21) ^{Aa}	13.26 (0.25) ^{Ab}	16.46 (0.19) ^{B_b}	16.04 (0.07) ^{B_b}	22.21 (0.25) ^{EF_c}	17.97 (0.16) ^{C_b}	23.58 (1.83) ^{F_c}	21.99 (0.09) ^{E_c}	22.12 (0.31) ^{EF_b}	22.32 (0.75) ^{EF_c}	***
	21	20.14 (0.14) ^{E_{bc}}	14.19 (0.12) ^{Ba}	12.15 (0.01) ^{Aa}	15.55 (0.43) ^{Ca}	21.68 (0.25) ^{F_d}	17.64 (1.53) ^{Da}	17.31 (0.01) ^{D_{ab}}	15.05 (0.06) ^{Ca}	17.69 (0.24) ^{Da}	15.32 (0.47) ^{BC_a}	17.43 (0.02) ^{Da}	***
Sig.		***	***	***	***	***	***	***	***	***	***	***	
b*	0	6.55 (1.03) ^{A_{ab}}	6.55 (1.03) ^{Ab}	6.55 (1.03) ^{Ab}	6.55 (1.03) ^{Aa}	6.55 (1.03) ^{Ac}	6.55 (1.03) ^{Ab}	6.55 (1.03) ^{Ab}	6.55 (1.03) ^{Aa}	6.55 (1.03) ^{A_{ab}}	6.55 (1.03) ^{Ab}	6.55 (1.03) ^{Ab}	NS

	1	5.80 (0.01) ^{Ca}	4.91 (0.09) ^{ABa}	6.72 (0.16) ^{Db}	6.68 (0.53) ^{Da}	5.33 (0.01) ^{BCb}	4.58 (0.09) ^{Aa}	10.28 (0.30) ^{Gc}	9.03 (0.12) ^{Fb}	11.20 (0.13) ^{Hc}	7.75 (0.19) ^{Eb}	5.77 (0.54) ^{Cb}	***
	3	7.02 (0.09) ^{CDEFb}	5.30 (0.14) ^{ABCa}	8.34 (0.25) ^{Fc}	7.77 (2.62) ^{DEFa}	3.29 (0.01) ^{Aa}	6.41 (0.67) ^{BCDEFb}	4.21 (0.22) ^{ABa}	5.95 (1.44) ^{BCDEa}	5.54 (0.28) ^{BCDa}	6.96 (0.01) ^{CDEFb}	8.00 (0.43) ^{EFc}	*
	7	5.67 (0.26) ^{Ba}	6.50 (0.05) ^{BCDb}	6.16 (0.71) ^{BCb}	8.47 (0.02) ^{Ea}	4.65 (0.32) ^{Ab}	6.80 (0.13) ^{CDb}	4.64 (0.02) ^{Aa}	6.18 (0.03) ^{CDa}	6.10 (0.15) ^{BCab}	7.29 (0.81) ^{Db}	11.93 (0.26) ^{Fd}	***
	14	5.86 (0.20) ^{Ba}	7.16 (0.11) ^{Cb}	4.45 (0.12) ^{Aa}	8.62 (0.70) ^{Da}	4.49 (0.15) ^{Ab}	4.49 (0.30) ^{Aa}	9.11 (0.72) ^{DEc}	6.05 (0.19) ^{Ba}	7.38 (0.59) ^{Cb}	9.65 (0.14) ^{Ec}	8.59 (0.43) ^{Dc}	***
	21	6.74 (0.04) ^{Dab}	6.65 (0.03) ^{Db}	7.50 (0.09) ^{Dbc}	7.04 (0.71) ^{Da}	8.94 (0.20) ^{Ed}	3.17 (1.11) ^{Ba}	4.12 (0.19) ^{Ba}	6.67 (0.15) ^{Da}	5.62 (0.16) ^{Ca}	2.10 (0.44) ^{Aa}	4.14 (0.30) ^{Ba}	***
Sig.		*	***	***	***	***	***	***	***	***	***	***	
Chroma	0	23.56 (0.49) ^{Ad}	23.56 (0.49) ^{Ac}	23.56 (0.49) ^{Ac}	23.56 (0.49) ^{Ac}	23.56 (0.49) ^{Ad}	23.56 (0.49) ^{Ad}	23.56 (0.49) ^{Ac}	23.56 (0.49) ^{Ab}	23.56 (0.49) ^{Ac}	23.56 (0.49) ^{Ab}	23.56 (0.49) ^{Ac}	NS
	1	17.59 (0.02) ^{Aa}	20.76 (0.73) ^{Db}	18.28 (0.48) ^{ABb}	18.58 (0.49) ^{ABCb}	19.56 (0.11) ^{Cc}	18.78 (0.09) ^{BCab}	25.01 (0.1) ^{Ed}	24.04 (0.22) ^{Eb}	23.92 (0.01) ^{Ec}	23.96 (0.96) ^{Eb}	18.26 (0.70) ^{ABa}	***
	3	21.82 (0.42) ^{DEc}	21.87 (0.39) ^{DEb}	23.44 (0.36) ^{EFc}	27.12 (0.78) ^{Gd}	10.32 (0.06) ^{Aa}	19.54 (0.86) ^{CDab}	16.86 (0.72) ^{Ba}	19.67 (3.09) ^{CDa}	18.58 (0.67) ^{BCa}	24.72 (0.17) ^{Fb}	21.11 (0.31) ^{DEb}	***
	7	17.65 (0.44) ^{Aa}	21.29 (0.89) ^{BCDb}	19.19 (0.45) ^{ABb}	23.29 (0.14) ^{DEc}	19.17 (0.49) ^{ABc}	20.68 (0.24) ^{BCbc}	21.12 (0.75) ^{BCEb}	19.05 (1.29) ^{ABa}	21.58 (0.01) ^{CDb}	23.2 (1.96) ^{DEb}	24.21 (1.63) ^{Ec}	**
	14	20.60 (0.27) ^{Db}	16.22 (0.13) ^{ABa}	13.98 (0.28) ^{Aa}	18.58 (0.49) ^{Cb}	16.66 (0.03) ^{Bb}	22.66 (0.30) ^{Ecd}	20.15 (0.47) ^{Db}	24.34 (1.82) ^{Fb}	23.19 (0.28) ^{EFc}	24.13 (0.34) ^{EFb}	23.92 (0.86) ^{EFc}	***
	21	21.23 (0.14) ^{Fbc}	15.67 (0.09) ^{BCa}	14.28 (0.03) ^{Aa}	17.07 (0.68) ^{Da}	23.45 (0.31) ^{Gd}	17.93 (1.70) ^{DEa}	17.79 (0.03) ^{DEa}	16.87 (0.01) ^{Ca}	18.56 (0.27) ^{Ea}	15.47 (0.40) ^{ABa}	17.91 (0.09) ^{DEa}	***
Sig.		***	***	***	***	***	***	***	***	***	***	***	
Hue an- gle	0	0.28 (0.03) ^{Aa}	0.28 (0.03) ^{Aab}	0.28 (0.03) ^{Aa}	0.28 (0.03) ^{Aa}	0.28 (0.03) ^{Aa}	0.28 (0.03) ^{Acd}	0.28 (0.03) ^{Ab}	0.28 (0.03) ^{Aab}	0.28 (0.03) ^{Aa}	0.28 (0.03) ^{Ab}	0.28 (0.03) ^{Aab}	NS
	1	0.33 (0.01) ^{Cc}	0.23 (0.01) ^{Aa}	0.37 (0.01) ^{Db}	0.36 (0.02) ^{Dab}	0.27 (0.01) ^{Ba}	0.24 (0.01) ^{Abc}	0.42 (0.01) ^{Ec}	0.38 (0.01) ^{Dcd}	0.48 (0.01) ^{Fb}	0.32 (0.01) ^{Cb}	0.32 (0.01) ^{Cbc}	***
	3	0.32 (0.01) ^{CDEbc}	0.24 (0.01) ^{Aa}	0.36 (0.01) ^{DEb}	0.29 (0.09) ^{ABCDa}	0.32 (0.01) ^{BCDEb}	0.33 (0.02) ^{CDEd}	0.25 (0.01) ^{ABab}	0.30 (0.02) ^{ABCDab}	0.30 (0.01) ^{ABCDa}	0.28 (0.01) ^{ABCb}	0.38 (0.01) ^{Ec}	*
	7	0.32 (0.01) ^{CDbc}	0.31 (0.01) ^{Cb}	0.32 (0.03) ^{CDab}	0.37 (0.01) ^{Dab}	0.24 (0.01) ^{ABa}	0.33 (0.01) ^{CDd}	0.22 (0.01) ^{Aa}	0.33 (0.02) ^{CDbc}	0.28 (0.01) ^{BCa}	0.31 (0.01) ^{Cb}	0.51 (0.05) ^{Ed}	***
	14	0.28 (0.01) ^{CDab}	0.48 (0.01) ^{Gd}	0.32 (0.01) ^{Dab}	0.48 (0.02) ^{Gb}	0.27 (0.01) ^{BCa}	0.19 (0.01) ^{Aab}	0.46 (0.02) ^{Gc}	0.25 (0.01) ^{Ba}	0.32 (0.02) ^{Da}	0.41 (0.01) ^{Fc}	0.36 (0.01) ^{Ec}	***
	21	0.32 (0.01) ^{Cabc}	0.43 (0.01) ^{Dc}	0.55 (0.01) ^{Ec}	0.42 (0.02) ^{Db}	0.39 (0.01) ^{Dc}	0.17 (0.04) ^{Aa}	0.23 (0.01) ^{Bab}	0.40 (0.01) ^{Dd}	0.30 (0.01) ^{Ca}	0.13 (0.03) ^{Aa}	0.23 (0.01) ^{Ba}	***

A-H Mean values in the same row (corresponding to the same days of storage) not followed by a common uppercase letter differ significantly (p -value < 0.05).

a-f Mean values in the same column (corresponding to the same treatment) not followed by a common lowercase letter differ significantly (p-value < 0.05).

* p-value < 0.05; ** p-value < 0.01; *** p-value < 0.001; NS no significance (p-value > 0.05)