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Spraying with local anemone coronaria flower extract and isoflurane and its effect on the physiological characteristics of broiler chickens transported during different seasons.*

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Abstract

The effect of the extract Anemone coronaria and Isoflurane on the transport stress of broiler chickens transported during different seasons of the year was tested, The field experiment was conducted throughout the different seasons of the year during the months of February, March, July, August and with different densities in the transport cage. where the birds of type 308 ROSS were divided by 10 treatments for each transfer and three replicates for each treatment. And as follows, T1 control without spraying and 10 birds per cage. T2 control without spraying and the number of birds 12 in the cage. T3 Spraying the birds with an extract of local Anemone coronaria flowers at a concentration of 2% and the number of birds is 10 in the cage. T4 Spraying the birds with an extract of local Anemone coronaria flowers at a concentration of 4% and the number of birds 10 in the cage. T5 Spraying the birds with an extract of local Anemone coronaria flowers at a concentration of 6% and the number of birds 10 in the cage. T6 Spraying the birds with an extract of local Anemone coronaria flowers at a concentration of 2%. The number of birds is 12 in the cage. T7 Spraying the birds with an extract of local Anemone coronaria flowers at a concentration of 4%. The number of birds is 12 in the cage. T8 Spraying the birds with an extract of local Anemone coronaria flowers at a concentration of 6% and the number of birds is 12 in the cage. T9 Spraying birds with isoflurane at a concentration of 6%, the number of birds is 10 per cage. T10 Spraying birds with isoflurane at a concentration of 6%. The number of birds is 12 per cage ,The birds were sprayed for 5 minutes before the transfer process, according to the above treatments, and the duration of one transfer was 240 minutes ± 10 minutes, while these transactions led to a highly significant decrease ($p>0.01$) in the general rate of heterophile, as it recorded (34.79, 35.20 , 36.03%), respectively, compared with the two control treatments (38.62, 38.87) and in the heterophile/lymphocide ratio, as T9, T10, T5

recorded (0.66, 0.67, 0.69) compared with T1, T2 (0.78, 0.79), as well as a highly significant decrease in glucose (p>0.01), as T9, T10, and T5 were recorded (198.82, 200.64, 205.83) compared to T1, T2 (226.71, 229.24). A highly significant (p>0.01) superiority was observed in lymphocytes, as T9, T10, and T5 were recorded. (52.79, 52.56, 52.24) compared to T1 and T2 (49.08, 48.64)%, respectively. As for hemoglobin, T9, T10, T5 (9.42, 9.39, 9.02) gm/100 ml were superior to T1, T2 (8.99, 8.96) gm/100 ml. As well as a significant superiority in the percentage of packed volume cells, as it recorded T9, T10, T5 (34.15, 34.04, 33.06) compared with T1, T2 (30.96, 29.59)%, respectively.Also, there is a crease in the total protein concentration (2.71, 2.62, 2.50,) g/dl compared with T1 and T2 (2.06, 2.00) g/dl, respectively. It is noted from this experiment that the treatments of isoflurane and Anemone coronaria extract led to a reduction in the stress that affects birds during transport operations, and thus was reflected in the improvement of the productive performance and health of the transported birds.

Key words: *isoflurane, anemone flowers, stress broiler*

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Introduction

Stress caused by transportation occurs as a result of a combination of factors, such as vibration, movement, noise, stocking density, crowding, the difference in the social scale of birds, and temperature fluctuations, in addition to deprivation of water and feed before transportation [1]. Thus, poultry is vulnerable to technological stress in industrial production in all countries. around the world, which directly affects the health of birds and is reflected in human nutrition [2], [3],[4], [5],[6]. Therefore, in poultry farming, emphasis is placed on This significantly affected the prevention of stress, including stress caused by technology, which is associated with the intensity of poultry farming and use [7]. white blood, and the ratio of lymphocytes to heterotrophic cells in broiler chickens and had an effect on the intake of chicken feed and the level of glucose in the blood [8]. and mostly Leukocytes are frequently used to diagnose stress and characterize adaptive processes [9]. The reason for this is that the morphological composition of blood reflects the condition of the birds, as it is associated with the body's internal environment [10], [11], [12], [13]. So according to the dynamics of white blood cells, the degree of stress can be judged for each stage of the general adaptation syndrome ("short-term adaptation," "long-term adaptation") [14].The blood system and its cellular composition are thought to be a factor in innate resistance. the body to stress, as it changes very quickly in the course of executing the stress response [15], [16],[17],[18].The serious quest of researchers began to conduct experiments and scientific research to reduce the damage caused by types of stress. Through the use of medicinal drugs and medicinal plant extracts, which can be obtained through extraction methods [19], [16], [20].Anemone flowers are medicinal plants that have been used as a sedative or analgesic for pain, muscle relaxation, anticonvulsant and antihistamine effects, and are considered an anticonvulsant. To oxidative stress, it helps reduce nervous

hyperactivity due to the chemicals contained in these flowers [21]. Blood pressure and heart rate reduction as well as muscle relaxation [22]. Therefore, this study aims to conduct a study, the first of its kind in Iraq and the world, on the use of the extract of local anemone flowers and its effective compounds to know its effect on broiler chickens transported during seasons and with different transport densities and its effect on physiological characteristics, as well as increasing the well-being of birds by reducing transportation stress.

Materials and methods

The field experiment was conducted throughout the different seasons of the year, and the transfers took place in months and with different densities, as the first transfer was conducted in February, the second transfer in March, and the third transfer in July, and the last transfer was during the month of August. The birds of type 308 ROSS were divided into 10 treatments for each One shift and three replications for each treatment as T1 was a control treatment without spraying and the number of birds was 10 in the cage, T2 was a control without spraying and the number of birds was 12 in the cage T3 The birds were sprayed with an extract of local anemone flowers at a concentration of 2% and the number of birds was 10 in the cage T4 The birds were sprayed with an extract of local anemone flowers at a concentration of 4% The number of birds is 10 in cage T5, the birds are sprayed with an extract of local anemone flowers at a concentration of 6%, the number of birds is 10 in cage T6, the birds are sprayed with an extract of local anemone flowers at a concentration of 2%, the number of birds is 12 in cage T7, the birds are sprayed with the active substance of local anemone flowers at a concentration of 4%, and the number of birds is 12 in the cage. T8 spraying the birds with an extract of local anemone flowers at a concentration of 6%, the number of birds 12 per cage, T9 spraying the birds with isoflurane at a concentration of 6%, the number of birds 10 per cage. T10 Spraying birds with isoflurane at a concentration of 6%. The number of birds is 12 per cage. The process of spraying the birds to be marketed after placing them in plastic boxes prepared for transport with dimensions (96 x 67 x 15) was carried out with anemone extract and isoflurane, and then these cages were placed on (2) iron supports. The spraying process began with an electric evaporator device that It contains the materials of the experiment with the materials, while an insulating cover was placed on the cages to isolate the birds from the air and to ensure that these birds inhale the materials, and then the birds were transferred from the fields to the slaughterhouse, and the temperature and humidity were recorded on the day of the transfer, and the fumigation process continued for 5 minutes. The physical characteristics of the blood included in this study were measured after the process of transferring the birds to the slaughterhouse. Samples were taken from the blood of the transferred and treated birds by taking blood samples from 12 birds for each treatment by cutting the jugular vein. The blood was collected from 4 birds for each replicate in test tubes. The blood was placed in different tubes, the first containing an anticoagulant substance (EDTA), and it was stirred to prevent blood clotting and taken to the laboratory for blood tests (PCV, Hb, and differential number of white blood cells) in less than two hours from the time of collection. Other tubes of 10 ml capacity do not contain anticoagulant. After coagulation, the blood was placed in a centrifuge, where the blood serum was separated and kept directly at a temperature of -20 ° C to conduct blood tests. As for biochemistry, which included measuring the concentration of total protein, albumin, globulin, and glucose concentration, according to the work method attached to the kits produced by the Swiss company (agappe).

Statistical analysis

The Completely Randomized Design-CRD was used to study the effect of the studied coefficients on the different traits, and the averages were compared using the Duncan polynomial test (Duncan, 1955), and the ready-made statistical program (The Statistical Analysis System-SAS) was used in the statistical analysis according to The following mathematical model: $Yij = \mu + Ti + eij$

Results

Effect of spraying with local anemone flower extract and isoflurane on PCV

It is noted from the results of Table (1) that there are significant differences ($P < 0.05$) between the spray treatments and the two control treatments in PCV during the month of February. As for the rate of spraying during the winter season, the spraying treatments outperformed the two control treatments, as treatment T9 (34.82) and T10 (34.81) were recorded, followed by treatment T5 and T8 (33.88,33.87)%, respectively, and treatment T4 and T7 (33.44,33.43)%. T6 and T3 (32.91, 32.90)%, respectively, compared to treatments T1 and T2 (31.96, 31.94)%, respectively. During July and August, spraying treatments also recorded a highly significant superiority ($P<0.05$), and this was observed during the spraying rate in the summer season in PCV Where the treatment recorded T9 (33.49)%, followed by T10 (33.28), T5 (32.24), T8 (31.95), T4 (31.63), T7 (31.10), T3 (30.93), and T6 (30.51) compared to the two control treatments, T1 (29.97). T2 (27.24)%. As for the general rate, it was noticed that the spraying treatments were significantly superior ($P<0.05$), as T9 recorded (34.15%), followed by T10 (34.04%), then T5 (33.06%), T8 (32.91), and T4 (32.53).) And T7 (32.26), T3 (31.92), and T6 (31.71)% compared to the control workers T1 (30.96) and T2 (29.59)%. It is also noted the effect of transmission on PCV, as the results of Table (1) indicate that PCV recorded the highest values during March at a significant level ($P < 0.05$) and the lowest values were recorded during August, and this was observed during the comparison between the winter and summer transmission rates, where T9 recorded the highest The value of (34.82)% in the transport rate during the winter, as it decreased to (33.49)% in the transport rate during the summer.

Effect of spraying with local anemone flower extract and isoflurane on hemoglobin

The results of Table (2) indicate that there are highly significant differences ($P < 0.01$) between the spray treatments and the two control treatments in the concentration of hemoglobin during the month of February and this superiority continued during the month of March, as the treatment T9 and T10 recorded the highest concentration (9.98, 9.99) g/100, respectively, compared to With the rest of the treatments. As for the rate of spraying during the winter season, the spraying treatments outperformed the two control treatments, as treatment T9 and T10 recorded (10.04, 10.06) g/100, followed by T5 and T8 (9.90, 9.91) g/100, respectively, and T4 (9.83). And T7 (9.82), T3, and T6 (9.66, 9.67) g/100, respectively, compared to treatments T1 and T2 (9.59). During July and August, spraying treatments also recorded a highly significant superiority ($P<0.01$), and this was observed during the spraying rate in the summer season. In hemoglobin, the treatment recorded T9 (8.79), followed by T10, T5 (8.74), T8 (8.67), T4 (8.61), T7 (8.48), T3 (8.45), and T6 (8.39) g/100 compared to the two control treatments, T1 (8.39). T2 (8.33) g/100. As for the general rate, it was noted that the spraying treatments had a highly significant superiority ($P < 0.01$), as T9 recorded (9.42), followed by T10 (9.39), then T5 (9.32) and T8 (9.28), T4 (9.22), T7 (9.15), T3 (9.06), and T6 (9.02) gm/100, compared to the control T1 (8.99) and T2 (8.96) gm/100. It is also noted the effect of transfer on hemoglobin, as the results of Table (2) indicated that hemoglobin recorded the highest values during the month of March, and the lowest values were recorded during the month of August. The transport rate during the winter decreased to

(8.79) g/100 in the transport rate during the summer

Table (1) Effect of spraying with local anemone extract and isoflurane on PCV volume (%) in broiler chickens (mean ± standard error)

Treat.	transportation during the winter		transportation during the summer		Transfer rate during the winter	Transfer rate during the summer	General Average
	February	March	July	August			
T1	32.88± 0.13 E a	31.04± 0.09 Eb	30.95±0.05 Hb	28.99 ±0.23 Ib	31.96±0.3 Ea	29.97 ± 0.17 I b	30.96±0.10 I
T2	32.84± 0.03 Ea	31.05 ±0.05 Eb	28.24±0.08 Jc	26.24 ±0.27 Jd	31.94±0.12 Ea	27.24±0.36 Jb	29.59± 0.16 J
T3	0.37±33.61 Da	32.22± 0.27 Db	31.48±0.36 Gc	30.37± 0.23 Gd	32.91±0.18 Da	30.93± 0.16 Gb	31.92±0. 90 G
T4	0.33±33.77 C a	33.11 ±0.13 Cb	32.01±0.12 Ec	31.25±0.24 Ed	33.44±0.68 Ca	31.63±0.17 E b	32.53±0.16 E
T5	0.13±34.22 B a	33.54 ±0.01 Bb	32.55±0.09 Cc	31.93± 0.64 Cd	33.88±0.76 Ba	32.24± 0.33 C b	33.06±0. 22 C
T6	0.36±33.60 D a	32.21±0.33 D b	30.92±0.33 Ic	30.10 ±0.37 Hd	32.90±0.11 Da	30.51±0.01 Hb	31.71± 0.14 H
T7	0.31±33.76 C a	33.10 ±0.12 Cb	31.55±0.08 Fc	30.65 ± 0.55 Fd	33.43±0.15 Ca	31.10 ± 0.04 Fb	32.26 ±0.44 F
T8	0.12±34.21 B a	33.53± 0.02 Bb	32.46 ± 0.07 Dc	31.44± 0.61 Dd	33.87±0.60 Ba	31.95±0.39 Db	32.91±0.30 D
T9	0.33±34.89 A a	34.76 ±0.19 Ab	33.99 ±0.33 Ac	32.99± 0.47 Ad	34.82±0.66 Aa	33.49± Ab 0.67	34.15 ±0.28 A
T10	0.31±34.88 A a	34.75 ± 0.13 Ab	33.78 ±0.34 Bc	32.77± 0.40 Bd	34.81±0.17 Aa	33.28± 0.61 Bb	34.04±0.08 B

The different capital letters within the same column indicate that there are significant differences between the coefficients.

* The different small letters within the same row indicate that there are significant differences between the transfers.

** Indicates that there are high significant effects (P > 0.01) between the treatments * Indicates that there are significant effects (P > 0.05) between the treatment

T1 Control treatment without spraying, the number of birds is 10. T2 Control treatment without spraying, the number of birds is 12. T3 The treatment of spraying with anemone extract at a concentration of 0.02. T4 The treatment of spraying with anemone extract at a concentration of 0.04. T5 Spray treatment with anemone extract at a concentration of 0.06. T6 Spraying treatment with anemone extract at a concentration of 0.02, number of birds 12. T7 Treatment of spraying with anemone extract, number of 12 birds, at a concentration of 0.04. T8 spray treatment anemone extract, number of 12 birds, at a concentration of 0.06. T9 spraying birds with isoflurane, number of birds 10, concentration 0.06 T9 spraying birds with isoflurane, number of birds 12, concentration 0.06

Table (2) Effect of spraying with local anemone flower extract and isoflurane on hemoglobin (g/100 ml) in broiler chickens (mean ± standard error)

Treat.	transportation during the winter		transportation during the summer		Transfer rate during the winter	Transfer rate during the summer	General Average
	February	March	July	August			
T1	9.69± 0.21 Fa	9.50± 0. 15 Eb	8.48± 0.17 Fb	8.30 ± 0.15 Gc	9.59 ±0.11 Ea	0.15±8.39 G b	0.43± 8.99 I
T2	9.68±0.11 Fa	9.51 ±0.12 E b	8.42± 0.19 G c	8.25± 0.18 I d	9.59 ±0.13 Ea	8.33± 0.37 Hb	8.96± 0.35 J
T3	9.76±0.35 Ea	9.59± 0.11 D b	8.52±0.28 Dc	8.37± 0.23 F d	9.67 ± 0.23 D a	8.45 ± 0.33 Fa	9.06 ±0.10 G
T4	9.89±0.33 Ca	9.77± 0.33 C b	8.76 ± 0.20 Cc	8.46 ± 0.45 D d	9.83±0.03 Ca	8.61 ±0.27 D b	9.22± 0.15 E
T5	9.99±0.19 Ba	9.83± 0.24 Bb	8.89 ± 0.22 Bc	8.59 ± 0.23 B d	9.91±0.28 Ba	8.74 ± 0.16 B b	9.32 ± 0.16 C
T6	9.75±0.14 Ea	9.58 ±0.11 D b	8.48±0.27 Fc	8.30± 0.25 Hd	9.66 ±0.73 Da	8.39±0.28 Gb	9.02± 0.04 H
T7	9.88 ±0.11 Da	9.76±0.20 Cb	8.58 ±0.19 Cc	8.38±0.22 Ed	9.82±0.14 Ca	8.48± 0.16 E b	9.15 ± 0.15 F
T8	9.98±0.15 Ba	9.82±0.23 Bb	8.87 ±0.22 Bc	8.46 ±0.22 Cc	9.90± 0.17 Ba	8.67 ± 0.17 Cb	9.28 ±0.37 D
T9	10.13± 0.28 A a	9.99±0.31 Ab	8.94± 0.37 Ac	8.65 ± 0.34 A d	10.06±0.14 Aa	8.79±0.27 Ab	9.42± 0.49 A
T10	10.11± 0.29 A a	9.98± 0. 28 A b	8.88± 0.33 Bc	8.59 ± 0.31 B d	10.04±0.83 Aa	8.74 ±0.16 B b	9.39± 0.40 B

The different capital letters within the same column indicate that there are significant differences between the coefficients.

* The different small letters within the same row indicate that there are significant differences between the transfers.

** Indicates that there are high significant effects (P > 0.01) between the treatments * Indicates that there are significant effects (P > 0.05) between the treatments

T1 Control treatment without spraying, the number of birds is 10. T2 Control treatment without spraying, the number of birds is 12. T3 The treatment of spraying with anemone extract at a concentration of 0.02. T4 The treatment of spraying with anemone extract at a concentration of 0.04. T5 Spray treatment with anemone extract at a concentration of 0.06. T6 Spraying treatment with anemone extract at a concentration of 0.02, number of birds 12. T7 Treatment of spraying with anemone extract, number of 12 birds, at a concentration of 0.04. T8 spray treatment anemone extract, number of 12 birds, at a concentration of 0.06. T9 spraying birds with isoflurane, number of birds 10, concentration 0.06 T9 spraying birds with isoflurane, number of birds 12, concentration 0.06.

Effect of spraying with local anemone flower extract and isoflurane on heterotrophic cells

The results of Table (3) show a high percentage of heterotrophic cells in stressed birds, while a significant decrease (P<0.05) is observed for heterotrophic cells in spraying treatments. During February, a decrease in heterotrophic cells is observed. It is also noted that heterotrophic cells decreased during the month of March in the spraying treatments, as the treatment T9 recorded the lowest value (33.01)% compared to the rest of the experimental treatments. As for the rate of spraying during the winter, the spraying treatments recorded the lowest value compared to the two treatments of control and the rest of the treatments, as T9 recorded (32.75%) It was followed by T10 (32.93), followed by T5 and T8 (34.31, 34.30), T4 and T7 (35.01, 34.99), T3 and T6 (35.63, 35.62)%, respectively, then T1 and T2, which recorded (36.62, 36.61)%, respectively. July and August also spraying treatments recorded a significant decrease

(P<0.05), and this was observed in the spraying rate during the summer season for heterotrophic cells, where T9 recorded the lowest value (36.84%), followed by T10 (37.48), T5 (37.77), T8 (38.46), and T4 (39.00), T7 (39.49), T3 (40.09), and T6 (40.35)%, while T1 recorded (40.63)% and T2 recorded (41.12%). As for the general rate of heterogeneous cells, it was noted that spraying treatments decreased significantly for heterogeneous cells (P<0.05). It recorded T9 (34.79%), followed by T10 (35.20%), then T5 (36.03), T8 (36.38), T4 (36.99), T7 (37.25), T3 (37.86), and T6 (37.99)%, compared to the two control treatments, T1 (38.62 %) and T2, which recorded the highest value (38.87%). It is noted that the effect of the transfer on the heterozygous cells, where the percentage of these cells increased significantly (P < 0.05), as the results of Table (3) indicate that the heterozygous cells recorded the lowest value during the month of March and recorded the highest values during the month of August, and this is what was observed during the comparison between the rate of winter transfers And summer, where T9 recorded (32.75)% in the transfer rate during the winter, as it increased to (36.84)% in the transfer rate during the summer.

The different capital letters within the same column indicate that there are significant differences between the coefficients.

Table (3) Effect of spraying with local anemone flower extract and isoflurane on heterotrophic cells (%) in broiler chickens (mean ± standard error)

Treat.	transportation during the winter		transportation during the summer		Transfer rate during the winter	Transfer rate during the summer	General Average
	February	March	July	August			
T1	35.60±0.58 Ad	0.20±37.63 A c	38.83±0.51 Bb	42.43±0.33 Aa	36.61±0.10 Ab	0.24± 40.63 B a	38.62±0.61 B
T2	35.61±0.58 Ad	37.64±0.27 A c	39.66±0.58 Ab	42.58±0.55 Aa	36.62±0.15 Ab	0.24±41.12 A a	38.87±0.69 A
T3	34.52±0.33 Bd	36.72±0.20 Bc	38.58±0.33 Cb	41.60±0.62 Ba	35.62±0.11 Bb	40.09±0.08 Da	37.86±0.59 D
T4	34.34±0.19 Cd	35.65±0.58 Cc	0.27±37.53 E b	40.47±0.37 Da	34.99±0.29 Cb	39.00 ±0.17 Fa	36.99±0.14 F
T5	34.27±0.18 Dd	34.34±0.41 Dc	36.55±0.33 G b	38.98±0.74 Fa	34.30±0.12 Db	37.77±0.17 Ha	36.03±0.08 H
T6	34.53±0.12 Bd	36.74±0.23 Bc	38.78±0.23 Bb	41.91±0. 33 Ba	35.63±0.12 Bb	40.35±0.29 Ca	37.99±0.61 C
T7	34.36±0.23 C d	35.66±0.01 Cc	38.08± 0.32 D b	40.91±0.07 Ca	35.01±0.15 Cb	39.49± 0.03 E a	37.25±0.18
T8	34.28±0.12 Dd	34.35±0.34 Dc	37.00±0.39 Fb	39.93±0.89 Ea	34.31± 0.28 Db	38.46±0.16 G a	36.38±0.14 G
T9	32.50±0.12 Ed	33.01±0.20 Fc	35.65±0.33 Ib	38.04±0.77 Ga	32.75±0.17 Fb	36.84± 0.17 I a	34.79±0.30 J
T10	32.52 ±0.19 Ed	33.34±0.15 E c	36.00± 0.13 Hb	38.95±0.48 Fa	32.93±0.15 E b	37.48±0.08 Ia	35.20±0.27 I

* The different small letters within the same row indicate that there are significant differences between the transfers.

** Indicates that there are high significant effects (P > 0.01) between the treatments

* Indicates that there are significant effects (P > 0.05) between the treatments

T1 Control treatment without spraying, the number of birds is 10. T2 Control treatment without spraying, the number of birds is 12. T3 The treatment of spraying with anemone extract at a concentration of 0.02. T4 The treatment of spraying with anemone extract at a concentration of 0.04. T5 Spray treatment with anemone extract at a concentration of 0.06. T6 Spraying treatment with anemone extract at a concentration of 0.02, number of birds 12. T7 Treatment of spraying with anemone extract, number of 12 birds, at a concentration of 0.04. T8 spray treatment anemone extract, number of 12 birds, at a concentration of 0.06. T9 spraying birds with isoflurane, number of birds 10, concentration 0.06 T9 spraying birds with

isoflurane, number of birds 12, concentration 0.06.

Effect of spraying local anemone flower extract and isoflurane on lymphocytes

The results of Table (4) indicate that there are significant differences (P < 0.05) between the spray treatments and the two control treatments for lymphocytes during the month of February. Experimental treatments. As for the rate of spraying during the winter season, the spraying treatments were superior to the two control treatments, as treatment T9 and T10 recorded (53.57, 53.58)%, respectively, followed by treatment T5 and T8 (53.08, 53.09)%, respectively, and treatment T4 and T7 (52.28, (52.26) and treatments T3 and T6 (50.88, 50.89)% compared to treatments T1 and T2 (50.62%). During July and August, spraying treatments also recorded a significant superiority (P<0.05), and this was observed during the spraying rate for the summer season for lymphocytes, as the treatment recorded T9 (52.00%), followed by T10 (51.55), T5 (51.38), T8 (50.68), and T8 (50.68). T4 (50.28), T7 (49.65), T3 (49.50) and T6 (48.42) compared to the two control treatments T1 (47.55) and T2 (46.65%). As for the general rate, it was noted that the spraying treatments had a significant superiority (P < 0.05), where T9 recorded the highest value (52.79%), followed by T10 (52.56%), then T5 (52.24), T8 (51.88), T4 (51.28), T7 (50.95), T3 (50.19), and T6 (49.65%) compared to the two control workers (T1). (49.08)% and T2 (48.64)%.It is also noted the effect of transport on lymphocytes, as it is noted from the results of Table (4) that lymphocytes recorded the highest values during the month of March and recorded the lowest values during the month of August, and this is what was observed during the comparison between the rate of transfers winter and summer Where T9 recorded the highest value (53.58)% in the transfer rate during the winter, as it decreased to (52.00)% in the transfer rate during the summer, and in succession for the rest of the transactions.

Table (4) Effect of spraying with local anemone flower extract and isoflurane on lymphocytes (%) in broiler chickens (mean ± standard error)

Treat.	transportation during the winter		transportation during the summer		Transfer rate during the winter	Transfer rate during the summer	General Average
	February	March	July	August			
T1	50.81± 0.67 E a	50.43±0.44 Eb	48.59 ± 0.34 I c	46.50± 0.16 Fd	0.49±50.62 E a	47.55±0.15 H b	49.08±0.57 I
T2	50.80±0.63 Ea	50.44±0.33 Eb	47.53± 0.31 J c	45.77± 0.18 G d	0.29±50.62 E a	46.65± 0.09 I b	48.64± 0.52 J
T3	51.17±0.63 Da	50.61±0.38 D b	50.34 ±0.22 Gc	48.65 ±0.32 Dd	0.31±50.89 D a	49.50± 0.17 Fb	50.19± 0.25 G
T4	52.76±0.43 Ca	51.79±0.36 Cb	51.03± 0.26 E c	49.53 ±0.36 Cd	0.17±52.28 C a	50.28±0.35 Eb	51.28± 0.16 E
T5	53.77±0.03 B	52.42± 0.21 B	51.57±0.38 C	51.19 ±0.27 B	0.60±53.09 B a	51.38 ± 0.17 b	52.24±0.25 C
T6	51.16 ±0.16 Da	50.60±0.22 D b	49.53± 0.20 H c	47.32±0.33 Ed	0.82±50.88 D a	48.42± 0.16 G	49.65 ±0.79 H
T7	52.75±0.11 Ca	51.78± 0.14 Cb	50.53±0.25 F c	48.77 ±0.24 Dd	0.10±52.26 C a	49.65± 0.11 F	50.95± 0.55 F
T8	53.76±0.17 Ba	52.41±0.23 Bb	51.53± 0.91 D c	49.84±0.42 Cd	0.87±53.08 B a	50.68± 0.50 Db	51.88±0.50 D
T9	54.17 ±0.33 Aa	52.99±0.28 A b	52.29±0.45 A c	51.71± 0.29 A d	0.61±53.58 A a	52.00 ±0.17 Ab	52.79± 0.63 A
T10	54.16 ±0.29 Aa	52.98±0.27 Ab	51.75±0.41 Bc	51.35 ±0.23 Bd	A a0.67±53.57	51.55±0.55 Bb	52.56±0.60 B

The different capital letters within the same column indicate that there are significant differences between the coefficients.

* The different small letters within the same row indicate that there are significant differences between the transfers.

** Indicates that there are high significant effects (P > 0.01) between the treatments

* Indicates that there are significant effects (P > 0.05) between the treatments

T1 Control treatment without spraying, the number of birds is 10. T2 Control treatment without spraying, the number of birds is 12. T3 The treatment of spraying with anemone extract at a concentration of 0.02. T4 The treatment of spraying with anemone extract at a concentration of 0.04. T5 Spray treatment with anemone extract at a concentration of 0.06. T6 Spraying treatment with anemone extract at a concentration of 0.02, number of birds 12. T7 Treatment of spraying with anemone extract, number of 12 birds, at a concentration of 0.04. T8 spray treatment anemone extract, number of 12 birds, at a concentration of 0.06. T9 spraying birds with isoflurane, number of birds 10, concentration 0.06 T9 spraying birds with isoflurane, number of birds 12, concentration 0.06.

Effect of spraying with local anemone flower extract and isoflurane on heterologous to lymphoid cells

The results of Table (5) show an increase in the ratio of heterotrophic cells to lymphocytes in stressed birds and a significant decrease ($P < 0.05$) for heterotrophic cells to lymphoid cells in spraying treatments. It is noted during the month of February that heterochromia cells decreased to lymphocytes during the month of February. It is also noted that heterotrophic cells decreased to lymphocytes during the month of March in the spraying treatments, where the treatment T9 and T10 recorded the lowest value (0.62%) compared to the rest of the experimental treatments. As for the rate of spraying during the winter season, the spraying treatments recorded the lowest value compared to the two treatments of control and the rest of the treatments, as it recorded T9 and T10 (0.61)%, followed by T5 and T8 (0.64), T4 and T7 (0.66), T3 and T6 (0.69 and 0.70)%, then T1 and T2 (0.72%). In July and August, spraying treatments also recorded a significant decrease (0.05). P> This is what was observed in the rate of spraying during the summer season for hetero-lymphoid cells, where T9 recorded the lowest value (0.70%), followed by T10 (0.72), T5 (0.73), T8 (0.75), T4 (0.77), T7 (0.79) and T3 (0.81) and T6 (0.83)%, while T1 recorded (0.85)% and T2 recorded (0.88%). As for the general rate of the ratio of heterogeneous cells to lymphocytes, it is noted that the spraying treatments decreased at a significant level ($P<0.05$), as T9 recorded (0.66). followed by T10 (0.67), then T5 (0.69), T8 (0.70), T4 (0.72), T7 (0.73), T3 (0.75), and T6 (0.76)%, compared to the two control treatments, T1 (0.78) and T2, which recorded the highest value. (0.79) %. It is noted that the effect of transfer on heterotrophic cells to lymphocytes is significantly lower ($P < 0.05$), as the results of Table (5) indicate that the ratio of heterochromatic cells to lymphoid cells recorded the lowest value during the month of March and recorded the highest values during the month of August, and this is what was observed during the comparison between the rate of transfers Winter and summer, where T9 recorded (0.61)% in the transfer rate during the winter, as it increased to (0.70)% in the transfer rate during the summer. The same applies to the rest of the coefficients.

Table (5) Effect of spraying with local anemone flower extract and isoflurane on heterotrophic: lymphocytes (%) in broiler chickens (mean ± standard error)

Treat.	transportation during the winter		transportation during the summer		Transfer rate during the winter	Transfer rate during the summer	General Average
	February	March	July	August			
T1	0.70± 0.06 Ad	0.74±0.05 Ac	0.79± 0.08 B b	0.91 ± 0.06 B a	0.72±0. 06 A b	0.85± 0.06 B a	0.78 ±0.07 B
T2	0.70±0.07 Ad	0.74±0.08 Ac	0.83±0.10 Ab	0.93 ±0.07 Aa	0.72± 0.07 A b	0.88±0.06 A a	0.79± 0.08 A
T3	0.67± 0.06 Bd	0.72±0.04 Bc	0.76±0.04 Cb	0.85 ±0.04 Ca	0.69±0. 02 Bb	0.81±0.03 Da	0.75 ±0.05 D
T4	0.65±0.05 Cd	0.05± 0.68 Cc	0.73±0.06 Eb	0.81± 0.06 E a	0.66±0.05 Cb	0.77±0.05 Ea	0.72± 0.02 F
T5	0.63 ±0.01 D d	0.65± 0.04 Dc	0.70±0.07 Gb	0.76±0.05 Ga	0.04±0.64 D b	0.73±0.05 Ga	0.69± 0.04 H
T6	0.67 ±0.03 Bb	0.72±0.04 Bc	0.78±0. 06 Bb	0.88±0.07 Ba	0.70 ±0.03 Bb	0.83±0.04 C a	0.76 ±0.04 C
T7	0.65± 0.04 C d	0.68±0.05 Cc	0.75± 0.09 D b	0.83±0.05 Da	0.66± 0.02 Cb	0.79±0.05 Da	0.73± 0.08 E
T8	0.63±0.02 Dd	0.65± 0.05 Dc	0.71±0.03 Fb	0.80±0.02 Fa	0.64±0.05 Db	0.75±0.04 Fa	0.70 ± 0.06 G
T9	0.59± 0.01 Ed	0.62 ±0.01 Ec	0.68 ± 0.06 I b	0.02±0.73 H a	0.61±0.02 Eb	0.02±0.7 Ha	0.66± 0.01 I
T10	0.60 ±0.02 Ed	0.62 ±0.03 Ec	0.69±0.06 Hb	0.02±0.75 G a	0.61±0.03 Eb	0.72±0.02 Ga	0.67± 0.01 J

The different capital letters within the same column indicate that there are significant differences between the coefficients.

* The different small letters within the same row indicate that there are significant differences between the transfers.

** Indicates that there are high significant effects (P > 0.01) between the treatments

* Indicates that there are significant effects (P > 0.05) between the treatments.

T1 Control treatment without spraying, the number of birds is 10. T2 Control treatment without spraying, the number of birds is 12. T3 The treatment of spraying with anemone extract at a concentration of 0.02. T4 The treatment of spraying with anemone extract at a concentration of 0.04. T5 Spray treatment with anemone extract at a concentration of 0.06. T6 Spraying treatment with anemone extract at a concentration of 0.02, number of birds 12. T7 Treatment of spraying with anemone extract, number of 12 birds, at a concentration of 0.04. T8 spray treatment anemone extract, number of 12 birds, at a concentration of 0.06. T9 spraying birds with isoflurane, number of birds 10, concentration 0.06 T9 spraying birds with isoflurane, number of birds 12, concentration 0.06.

Effect of spraying with local anemone flower extract and isoflurane total protein

The results of Table (6) indicate that there are highly significant differences (P < 0.01) between the spray treatments and the two control treatments in total protein concentration during the month of February. The rest of the treatments. As for the rate of spraying during the winter season, the spraying treatments outperformed the two control treatments, as the treatment T9 and T10 recorded (3.08, 3.12) g/dl, respectively, followed by T5 and T8 (2.86, 2.88) and T4 and T7 (2.72, 2.70).) and treatments T3 and T6 (2.48, 2.45) g/dL compared to treatments T1 and T2 (2.32 and 2.29) g/dL, respectively. During July and August, spraying treatments also recorded a highly significant superiority (P<0.01). This was observed during the spraying rate in the summer season in total protein, as treatment T9 recorded (2.30) g/dl, followed by T10 (2.18), T5 (2.13), and T5 (2.13). T8 (2.04), T4 (1.98), T7 (1.92), T3 (1.83), and T6 (1.82) gm/dl compared to the control treatments T1 (1.77) and T2 (1.69) gm/dl. Spraying had a highly

significant superiority (P<0.01), as T9 recorded (2.71) g/dl, followed by T10 (2.62), then T5 (2.50), T8 (2.45), T4 (2.35), T7 (2.31), T3 (2.16), and T6. (2.14) gm/dl compared to the control T1 (2.05) and T2 (2.00) gm/dl. It is also noted the effect of transport on the concentration of total protein, as indicated by the results of Table (6) that the total protein recorded the highest values during the month of March and the lowest values were recorded during the month of August. /dl in the transport rate during the winter season, where it decreased to (2.30) g/dl in the transport rate during the summer.

Table (6) Effect of spraying with local anemone flower extract and isoflurane on serum total protein (g/dL) in broiler broilers (mean ± standard error)

Treat.	transportation during the winter		transportation during the summer		Transfer rate during the winter	Transfer rate during the summer	General Average
	February	March	July	August			
T1	2.43±0. 20 Ea	2.23±0.20 Eb	1.86±0.09 Hc	1.68±0. 10 Hd	2.33± 0.16 Ea	1.77±0.09 Ib	2.06 ±0.28 H
T2	2.39±0.19 Ea	2.20±0.22 Eb	1.77± 0.09 Ic	1.60±0.08 Id	2.29± 0.25 Ea	1.69±0.08 Jb	2.00±0.25 I
T3	2.58±0.16 Da	2.40±0.17 Db	1.93±0.10 Gc	1.75±0.14 Gd	2.48±0.23 Da	1.83±0.09 Gb	2.16 ±0.24 G
T4	2.77±0.27 Ca	2.66±0.22 Cb	2.06± 0.13 Ec	1.90±0.11 Ed	2.72±0.10 Ca	1.98±0. 11 Eb	2.35±0.24 E
T5	2.94±0.28 Ba	2.81±0.16 Bb	2.20± 0.13 Cc	2.04±0.16 Cd	2.88±0.20 Ba	2.13±0.20 Cb	2.50±0.29 C
T6	2.54±0.10 Da	2.38±0.13 Db	1.94±0.11 Gc	1.69±0.23 Hd	2.45±0.10 Da	1.82 ±0.15 Hb	2.14 ± 0.29 G
T7	2.75±0.21 Ca	2.65±0.23 Cb	2.01±0.10 Fc	1.83±0. 31 Fd	2.70±0.12 Ca	1.92± 0.17 Fb	2.31±0.27 F
T8	2.91±0.25 Ba	2.81±0.21 Bb	2.12±0.13 Dc	1.97±0.11 Dd	2.86±0.20 Ba	2.04 ± 0.20 Db	2.45 ± 0.28 D
T9	3.16±0.33 Aa	3.08±0.33 Ab	2.41± 0.16 Ac	2.21±0.19 Ad	3.12 ±0.25 Aa	2.30±0.17 Ab	2.71± 0.31 A
T10	3.12±0.31 Aa	3.05±0.34 Ab	2.25±0.15 Bc	2.12±0.19 Bd	3.08±0.25 Aa	2.18± 0.19 Bb	2.62 ±0.33 B

The different capital letters within the same column indicate that there are significant differences between the coefficients.

* The different small letters within the same row indicate that there are significant differences between the transfers.

** Indicates that there are high significant effects (P > 0.01) between the treatments

* Indicates that there are significant effects (P > 0.05) between the treatments.

T1 Control treatment without spraying, the number of birds is 10. T2 Control treatment without spraying, the number of birds is 12. T3 The treatment of spraying with anemone extract at a concentration of 0.02. T4 The treatment of spraying with anemone extract at a concentration of 0.04. T5 Spray treatment with anemone extract at a concentration of 0.06. T6 Spraying treatment with anemone extract at a concentration of 0.02, number of birds 12. T7 Treatment of spraying with anemone extract, number of 12 birds, at a concentration of 0.04. T8 spray treatment anemone extract, number of 12 birds, at a concentration of 0.06. T9 spraying birds with isoflurane, number of birds 10, concentration 0.06 T9 spraying birds with isoflurane, number of birds 12, concentration 0.06.

Effect of spraying local anemone flower extract and isoflurane on albumin

The results of Table (7) indicate that there are highly significant differences (P < 0.01) between the spray treatments and the two control treatments in the concentration of albumin during the month of February and this superiority continued during the month of

March, as the treatment T10 and T9 recorded the highest concentration (1.85, 1.87) g/dl compared with The rest of the experimental treatments. With regard to the rate of spraying during the winter season, the spraying treatments excelled over the two control treatments, as treatment T10 and T9 recorded (1.89, 1.87) g/dL, followed by treatment T5 and T8 (1.71, 1.70), and treatment T4 and T7 (1.58, 1.59). And treatments T3 and T6 (1.39, 1.37) g/dL compared to treatments T1 and T2 (1.27, 1.25) g/dL, respectively. During July and August, spraying treatments also recorded a highly significant superiority (P<0.01), and this is what was observed during the spraying rate. In the summer season, the albumin concentration was recorded as T9 (1.37) g/dl, followed by T10 (1.30), T5 (1.29), T8 (1.24), T4 (1.22), T7 (1.20), T3 (1.16), and T6 (1.15).) g/dL, respectively, compared to the two control treatments, as they recorded T1 (1.14) and T2 (1.10) g/dL. With regard to the general rate, it was noted that the spraying treatments had a highly significant superiority (P<0.01), as they recorded T9 (1.63) g/dL, followed by T10 (1.58), then T5 (1.50) and T8 (1.47). There was no significant difference between T4 and T7 (1.39, 1.40), followed by T3 and T6, as the albumin concentration was (1.28, 1.26). g/dL compared to the two control factors T1 (1.21) and T2 (1.17) g/dL. The effect of the transfer on the concentration of the two albums is noted, as the results of Table (7) indicate that the albumin concentration recorded the highest values during the month of March and recorded the lowest values during the month of August. Transportation during the winter, where it decreased to (1.37) g/dl in the transport rate during the summer, as was the case for the rest of the treatments.

Table (7) Effect of spraying with local anemone flower extract and isoflurane on serum albumin (g/dL) in broiler chickens (mean ± standard error)

Treat.	transportation during the winter		transportation during the summer		Transfer rate during the winter	Transfer rate during the summer	General Average
	February	March	July	August			
T1	1.36 ±0.08 Ea	1.19 ±0.07 Eb	1.17±0.11 Hb	1.10±0,06 Fc	1.27±0.08 Ea	1.14±0.10 Ib	1.21±0.03 G
T2	1.34±0.011 Ea	1.17± 0.05 Eb	1.12±0.14 Ic	1.07±0. 08 Gd	1.25± 0.09 Ea	1.10 ±0.11 Jb	1.17±0.05 H
T3	1.45±0.09 Da	1.34 ±0.07 Db	1.19± 0.12 Gc	1.14±0.06 Ed	1.39 ±0.16 Da	1.16±0.06 Gb	1.28±0.09 F
T4	1.62±0.08 Ca	1.56±0.05 Cb	1.25±0.11 Ec	1.19±0. 04 Cd	1.59±0.09 Ca	1.22 ±0.09 Eb	1.40±0.10 E
T5	1.75± 0.08 Ba	1.67±0.03 Bb	1.33± 0.09 Cc	1.24±0.07 Bd	1.71± 0.07 Ba	1.29±0.10 Cb	1.50±0.10 C
T6	1.43 ± 0.07 Da	1.32±0.03 Db	1.18± 0.10 GHc	1.11±0.05 Fd	1.37±0.06 Da	1.15±0.16 Hb	1.26±0.08 F
T7	1.61 ±0.08 Ca	1.55±0.07 Cb	1.23±0.04 Fc	1.17±0.08 Dd	1.58± 0.05 Ca	1.20±0.09 Fb	1.39±0.07 E
T8	1.74 ± 0.09 Ba	1.66±0.08 Bb	1.29±0.03 Dc	1.20±0.07 Cd	1.70±0.10 Ba	1.24±0.14 Db	1.47±0.09 D
T9	1.92±0.11 Aa	1.87 ±0.08 Ab	1.44±0. 05 Ac	1.31±0. 06 Ad	1.89±0.13 Aa	1.37± 0. 16 Ab	1.63±0.10 A
T10	1.90±0.10 Aa	1.85±0. 05 Ab	1.35±0. 07 Bc	1.26±0.05 Bd	1.87±0.12 Aa	1.30 ± 0.15 Bb	1.58±0.07 B

The different capital letters within the same column indicate that there are significant differences between the coefficients.

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T1 Control treatment without spraying, the number of birds is 10. T2 Control treatment without spraying, the number of birds is 12. T3 The treatment of spraying with anemone extract at a concentration of 0.02. T4 The treatment of spraying with anemone extract at a concentration of 0.04. T5 Spray treatment with anemone extract at a concentration of 0.06. T6 Spraying treatment with anemone extract at a concentration of 0.02, number of birds 12. T7 Treatment of spraying with anemone extract, number of 12 birds, at a concentration of 0.04. T8 spray treatment anemone extract, number of 12 birds, at a concentration of 0.06. T9 spraying birds with isoflurane, number of birds 10, concentration 0.06 T9 spraying birds with isoflurane, number of birds 12, concentration 0.06.

Effect of spraying local anemone flower extract and isoflurane on globulin

It is clear from the results of Table (8) that there are significant differences ($P < 0.05$) between the spray treatments and the two control treatments in the concentration of globulin during the month of February, while it was observed that this superiority continued during the month of March, where the treatment T10 and T9 recorded the highest concentration (1.20, 1.21) g / dL respectively, compared with the rest of the experimental treatments. As for the rate of spraying during the winter season, the spraying treatments were superior to the two control treatments, as the treatment T10 and T9 recorded (1.21, 1.23) g/dl, followed by treatment T5 and T8, as they recorded (1.17, 1.16), and treatment T4 and T7 (1.13, 1.12), and treatments T3 and T6 (1.08, 1.09) gm/dl compared to treatments T1 and T2, as they recorded (1.06, 1.04) gm/dl, respectively. In July and August, spraying treatments also recorded a significant superiority ($P<0.05$), and this indicated The mechanism of spraying rate in the months of August and July affected the concentration of globulin, as treatment T9 recorded the highest value (0.93) g/dl, followed by T10 (0.88), T5 (0.84), T8 (0.80), T4 (0.76), T7 (0.72), T3, and T6, and there were no significant differences between them (0.67) gm/dl, while the lowest values of T1 (0.63), T2, (0.59) gm/dl were recorded in the two control treatments, respectively. As for the general average, superiority was observed with The sprayers had a highly significant superiority ($P<0.01$), as T9 recorded (1.08), followed by T10 (1.04), then T5 (1.00), and T8 (0.98) among T4 (0.95), T7 (0.92), and there was no significant difference between T3 and T6. (0.88) gm/dl, while control treatments T1 (0.85) and T2 (0.82) gm/dl, respectively. The effect of transport on the concentration of globulin is noted, as the results of Table (8) indicate that the concentration of globulin recorded the highest values during the month of March and the lowest values during the month of August. Transportation during the winter, where it decreased to (0.93) g/dl in the transportation rate during the summer, as was the case for the rest of the treatments.

Table (8) Effect of spraying with local anemone flower extract and isoflurane on broiler blood globulin (mean ± standard error)

Treat.	transportation during the winter		transportation during the summer		Transfer rate during the winter	Transfer rate during the summer	General Average
	February	March	July	August			
T1	1.07± 0.11 Ea	1.04±0.09 Eb	0.69±0.02 Hc	0.58±0.02 Hd	1.06±0.12 Ea	0.63±0.06 Hb	0.85±0.03 H
T2	1.05± 0.10 E a	1.03±0.12 Ea	0.65±0.06 Ib	0.53±0.05 1c	1.04±0.11 Ea	0.59±0.03 Ib	0.82±0.04 I
T3	1.13±0.09 Da	1.06±0.09 Db	0.74±0.01 Gc	0.61±0.03 Gd	1.09±0.10 Da	0.67±0.04 Gb	0.88±0.06 G
T4	1.15±0.12 Ca	1.10±0.08 Cb	0.81±0.02 Ec	0.71±0.06 Ed	1.13±0.13 Ca	0.76±0.02 Eb	0.95±0. 08 E
T5	1.19±0.03 Ba	1.14±0.04 Bb	0.87±0.03 Cc	0.80±0.03 Cd	1.17±0.10 Ba	0.84± 0.04 C b	1.00±0.06 C
T6	1±.110.09 Db	1.06±0.07 Db	0.76±0.04 Fc	0.58±0.03 Hd	1.08±0.14 Da	0.67±0.07 Gb	0.88±0.02 G
T7	1.14±0.11 Ca	1.10±0.07 Bb	0.78±0.01 Fc	0.07 ± 0.66 Fd	1.12± 0.12 C a	0.72± 0.08 F b	0.92±0.01 FC
T8	1.17±0.13 Ba	1.15±0.17 Ba	0.83±0.02 Db	0.77±0.06 Dc	1.16±0.13 Ba	0.80±0.09 Db	0.98±0.26 D
T9	1.24±0.15 Aa	1.21±0.12 Ab	0.97±0.05 Ac	0.90±0.07 Ad	1.23±0.15 Aa	0.93±0.05 Ab	1.08±0.12 A
T10	1.22±0.15 Aa	1.20±0.11 Aa	0.90±0.06 Bb	0.86±0.04 Bc	1.21±0.14 Aa	0.88±0.07 Bb	1.04±0.10 B

The different capital letters within the same column indicate that there are significant differences between the coefficients.

* The different small letters within the same row indicate that there are significant differences between the transfers.

** Indicates that there are high significant effects (P > 0.01) between the treatments

* Indicates that there are significant effects (P > 0.05) between the treatments

T1 Control treatment without spraying, the number of birds is 10. T2 Control treatment without spraying, the number of birds is 12. T3 The treatment of spraying with anemone extract at a concentration of 0.02. T4 The treatment of spraying with anemone extract at a concentration of 0.04. T5 Spray treatment with anemone extract at a concentration of 0.06. T6 Spraying treatment with anemone extract at a concentration of 0.02, number of birds 12. T7 Treatment of spraying with anemone extract, number of 12 birds, at a concentration of 0.04. T8 spray treatment anemone extract, number of 12 birds, at a concentration of 0.06. T9 spraying birds with isoflurane, number of birds 10, concentration 0.06 T9 spraying birds with isoflurane, number of birds 12, concentration 0.06.

Effect of spraying local anemone flower extract and isoflurane on glucose

The results of Table (9) indicate a highly significant decrease (P<0.01) for glucose in the spraying treatments compared with the two control treatments. It is noted during the month of February that glucose decreased in the spraying treatments. While it is also noted that glucose decreased during the month of March in the spraying treatments, as treatment T9 was recorded. And T10 had the lowest value (174.45, 174.48) mg/dL compared to the rest of the experimental treatments. As for the spraying rate during the winter season, the spraying treatments recorded the lowest value compared to the two control treatments, where T9 and T10 recorded (172.62, 172.88) mg/dL, followed by T5 and T8, as they were recorded (178.44, 178.13), T4 and T7 (181.20, 180.65), T3 and T6 (185.97, 185.80), then T1 and T2, as they recorded (193.06, 192.88) mg / dl, respectively. As for the month of July and August, spraying treatments also recorded a

highly significant decrease (P>0.01) This is what was observed in the rate of spraying in the summer season in glucose, where T9 recorded the lowest value (225.02), followed by T10 (228.41), T5 (233.56), T8 (240.43), T4 (241.93), and T7 (250.29) T3 (252.57) and T6 (257.50) mg/dl, while T1 recorded (260.53) and T2 recorded the highest glucose value (265.42) mg/dl. The spraying treatments showed a highly significant decrease (P<0.01), as T9 recorded (198.82), followed by T10 (200.64), then T5 (205.83), T8 (209.43), T4 (211.29), T7 (215.74), T3 (219.19), and T6 (221.73) compared to the two control treatments, T1 (226.71) and T2, which recorded the highest value (229.24). The effect of transport on glucose is highly significant (P>0.01), as the results of Table (9) indicate that glucose recorded the lowest value during the month of March and recorded the highest values during the month of August. mg/dl in the transport rate during the winter, as it increased to (225.02) mg/dl in the transport rate during the summer as well as in all treatments.

Table (9) Effect of spraying with local anemone flower extract and isoflurane on serum glucose (mg/dL) of broiler blood (mean ± standard error)

Treat	transportation during the winter		transportation during the summer		Transfer rate during the winter	Transfer rate during the summer	General Average
	February	March	July	August			
T1	189.44±2.33 Ad	196.33±1.12 Ac	257.66 ±3.17 Bb	263.40±5.64 Ba	192.88±3.28 Ab	260.53±5.36 Ba	226.71±4.23 B
T2	189.46±2.39 Ad	196.66±1.19 Ac	262.66±4.23 Ab	268.17±5.24 Aa	193.06±3.16 Ab	265.42±5.12 Aa	229.24±3.14 A
T3	182.28±2.32 Bd	189.33±1.55 Bc	248.06±4.29 Db	257.07±4.38 Da	185.80±3.19 Bb	252.57±4.10 Da	219.19±3.05 D
T4	177.21±2.21 Cd	184.10±2.66 Cc	237.83±4.44 Fb	246.04±3.35 Fa	180.65±2.49 Cb	241.93±5.24 Fa	211.29±3.25 F
T5	173.55±3.84 Dd	182.71±2.34 Dc	231.21±5.33 Hb	235.91±4.61 Ga	178.13±2.31 Db	233.56±5.20 Ha	205.83±4.06 H
T6	182.29±2.32 Bd	189.66±2.83 Bc	256.00±5.57 Cb	259.00±4.57 Ca	Bb3.18±185. 97	257.50±4.50 Ca	221.73±3.15 C
T7	178.28±2.52 Cd	184.13±1.23 Cc	246.43±4.68 Eb	254.16±4.16 Ea	181.20±3.46 Cb	250.29±4.21 Ea	215.74±3.12 E
T8	174.14±3.95 Dd	182.74±1.32 Dc	235.32±4.13 Gb	245.55±4.29 Fa	178.44± 2.47 Db	240.43±4.14 Ga	209.43±3.29 G
T9	170.79±3.13 Ed	174.45±2.46 Ec	223.50±4.50 Jb	226.55±4.29 Ia	172.62±2.23 Eb	225.02±4.37 Ja	198.82±4.07 J
T10	171.28±2.68 Ed	174.48±2.43 Ec	226.32±4.61 Ib	230.50±4.45 Ha	172.88±2.45 Eb	228.41±4.29 Ia	200.64±4.08 I

The different capital letters within the same column indicate that there are significant differences between the coefficients.

* The different small letters within the same row indicate that there are significant differences between the transfers.

** Indicates that there are high significant effects (P > 0.01) between the treatments

* Indicates that there are significant effects (P > 0.05) between the treatments

T1 Control treatment without spraying, the number of birds is 10. T2 Control treatment without spraying, the number of birds is 12. T3 The treatment of spraying with anemone extract at a concentration of 0.02. T4 The treatment of spraying with anemone extract at a concentration of 0.04. T5 Spray treatment with anemone extract at a concentration of 0.06. T6 Spraying treatment with anemone extract at a concentration of 0.02, number of birds 12. T7 Treatment of spraying with anemone extract, number of 12 birds, at a concentration of 0.04. T8 spray treatment anemone extract, number of 12 birds, at a concentration of 0.06. T9

spraying birds with isoflurane, number of birds 10, concentration 0.06 T9 spraying birds with isoflurane, number of birds 12, concentration 0.06.

Discussion

The effect of spraying with anemone flower extract and isoflurane on the traits and physiology of the transferred birds during the seasons of the year.

Stress greatly affects the health of birds, and this can be known through signs of physiological stress in broiler chickens and the negative effects reflected on the internal environment of birds, and this can be known through a study of the biochemistry of blood in broiler chickens, which were subjected to physiological stress, so some drugs that work to reduce stress were resorted to Medicinal plants have been used in this field.

Medicinal plants contain some compounds that have a biological effect such as antimicrobial, anti-inflammatory, and antioxidants [24],[25], and this result agrees with what was indicated by [21]and has a wide range of pharmacological activities. . Also, anemones contain a hypnotic and sedative substance (1,2,2-trichloro-1,1-difluoro Ethane) because they contain compounds similar to fluorine, which were observed through analysis, and which are considered compounds that work to relax the body, and this is what [26], [27].And these combined substances reduced the stress of birds. This is noted by the increase in the percentage of lymphocytes and the decrease of heterotrophs in Table (3,4), which led to a decrease in the corticosterone hormone, meaning that anemone and isoflurane led to a reduction in the corticosterone hormone and thus reducing the effect of stress. It reduces the decomposition of non-carbohydrate substances and the decomposition of amino acids and maintains their level in the blood plasma, and this is noted in Table (9). And that the glucose level decreased in the experimental treatments. These results agree with what was indicated by [28] that the plant extracts work to reduce the level of glucose. The reason may be due to the active substances, including essential fats and flavonoids, in reducing the amount of glucose formed in the liver, as well as inhibiting the formation of sugar from non-carbohydrate compounds (gluconeogenesis). Found in medicinal plants, including anemones, it stimulates beta cells in the liver to increase insulin secretion to reduce glucose formed during stress [29], [30]. The lungs to the cells of the body and carbon dioxide from the cells of the body to the lungs, thus maintaining the ratio of PCV, Hb and hemoglobin is important in transporting and supplying oxygen for cellular respiration [31], and this is noted in Table (1,2) and it is noted that the percentage of total protein, albumin and globulin is maintained higher than the two control treatments. These results agree with [32], [33] where they indicated that medicinal plants preserve proteins. kidney in laboratory animals through the components of each extract that act as an antioxidant and thus reduce lipid peroxidation and increase catalase and prevent oxidative stress in the animal body. Or the reason for maintaining total proteins, albumin and globulin may be due to the fact that these substances contain antioxidants that play an important role in reducing oxidative stress and thus Hormones secreted by the adrenal cortex reduce the breakdown of amino acids in the liver [29], [34]. This indicates that the spraying treatments led to maintaining the level of proteins and thus preserving the resistance of the immune system.

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الرش بمستخلص أزهار شقائق النعمان *anemone coronaria* المحلية والايزوفلوران وتأثيره على الصفات الفسلجية لفروج اللحم المنقول ضمن مواسم مختلفة

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- البحث مستل من رسالة ماجستير للباحث الاول .

المستخلص

تم دراسة تأثير مستخلص ازهار شقائق النعمان والايزوفلوران *anemone coronaria* على اجهاد النقل لفروج اللحم المنقول خلال فصول السنة المختلفة . واجريت التجربة الحقلية على مدار مواسم السنة المختلفة خلال الاشهر شباط واذار وتموز واب اذار وبكثافات مختلفة في قفص النقل ، اذ تم تقسيم الطيور نوع ROSS 308 بواقع 10 معاملات لكل نقلة وثلاث مكررات لكل معاملة. T1 سيطرة دون رش وعدد الطيور10 في القفص. T2 سيطرة دون رش وعدد الطيور12 في القفص .T3 رش الطيور بمستخلص ازهار شقائق النعمان المحلية بتركيز2 % وعدد الطيور 10 في القفص. T4 رش الطيور بمستخلص ازهار شقائق النعمان المحلية بتركيز 4 % وعدد الطيور 10 في القفص. T5 رش الطيور بمستخلص ازهار شقائق النعمان المحلية بتركيز 6 % وعدد الطيور 10 في القفص. T6 رش الطيور بمستخلص ازهار شقائق النعمان المحلية بتركيز 2% عدد الطيور 12 في القفص. T7 رش الطيور بمستخلص ازهار شقائق النعمان المحلية بتركيز4 % وعدد الطيور12 في القفص. T8 رش الطيور بمستخلص ازهار شقائق النعمان المحلية بتركيز 6% وعدد الطيور 12 في القفص.T9 رش الطيور بالايزوفلوران بتركيز 6% عدد الطيور10 في القفص. T10 رش الطيور بالايزوفلوران بتركيز 6% عدد الطيور 12 في القفص. تمت عملية رش الطيور لمدة 5 دقائق قبل عملية النقل وحسب المعاملات أعلاه وكانت مدة النقلة الواحدة 240 دقيقة ±10 دقائق ، ويلاحظ من نتائج التجربة انخفاض عالي المعنوي في نسبة هيتروفيل/الملفية اذ سجلت T9، T10 ، T5 (0.66، 0.67، 0.69) مقارنة مع T1، T2 (0.78 ، 0.79) وكذلك انخفاض عالي المعنوية في الكلوكوز ($p<0.01$) اذ سجلت T9، T10 ، T5 (198.82، 200.64، 205.83) مقارنة مع T1، T2 (226.71، 229.24) ويلاحظ تفوق عالي المعنوية ($p<0.01$) في الخلايا اللمفية اذ سجلت T9، T10، T5 (52.79، 52.56، 52.24) مقارنة T1، T2 (49.08، 48.64)% على التوالي. اما الهيموكلوبين فيلاحظ تفوق المعاملات T9، T10 ، T5(9.42، 9.39، 9.02) غم/100مل مقارنة مع T1، T2 (8.99، 8.96) غم/100مل. وكذلك تفوق معنوي في نسبة الخلايا المرصوصة حيث سجلت T9، T10، T5 (34.15، 34.04، 33.06) مقارنة مع T1، T2 (30.96، 29.59)

% على التوالي وكذلك يلاحظ تفوق في تركيز البروتين الكلي اذ سجلت T5، T10، T9 (2.71،2.62،2.50) غم/ديسلتر مقارنة مع T1، T2 (2.06، 2.00) غم/ديسلتر على التوالي ويلاحظ من هذه التجربة ان معاملات الايزوفلوران ومستخلص شقائق النعمان أدت الى التقليل من الاجهاد الذي يصيب الطيور خلال عمليات النقل وبالتالي انعكست على تحسن الأداء الإنتاجي وصحة الطيور المنقولة

الكلمات المفتاحية : الايزوفلوران ،ازهار شقائق النعمان ، اجهاد فروج اللحم.