

الآية

قال تعالى :



(وَمَا يَسْتَوِي الْبَحْرَانِ هَذَا عَذْبٌ فُرَاتٌ سَائِعٌ شَرَابُهُ وَهَذَا مِلْحٌ أُجَاجٌ وَمِنَ كُلِّ تَأْكُلُونَ لَحْمًا طَرِيًّا وَتَسْتَخْرِجُونَ حُلِيَّةً تَلْبَسُونَهَا وَتَرَى الْفُلْكَ فِيهِ مَوَاحِرَ لِنَبْتَعُوا مِنْ فَضْلِهِ وَلَعَلَّكُمْ تَشْكُرُونَ).

صدق الله العظيم

فاطر: 12

Dedication



My mother Aisha Salih Gebrel, who stucked into me love of science and search for knowledge, and has spared no effort to encourage me,,,

My father Mohamed Eltom Gebrel , who taught me the meaning of willpower, perseverance,

And diligence,,,

My lovely husband Yousif Khatem who encourage me and my sweetly children who were full of patience during the period of the study,,and,

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List of Contents

Contents	Page
Dedication	II
Acknowledgement	III
List of Contents	IV
List of Tables	VI
List of Appendix	VI
Abstract	VII
الخلاصة	VIII
Chapter One Introduction	
1. Introduction	1
Chapter Two Literature Review	
2.1 Fisheries In Sudan	4
2.1.1 <i>Oreochromis niloticus</i>	5
2.1.2 <i>Bagrus spp</i>	5
2.2 Quality Assurance of Fish Sector	6
2.3 Fish After Death Changes Stages	8
2.3.1 Rigor Mortis	8
2.3.2 Autolytic Spoilage	9
2.3.3 Bacterial Decomposition	9
2.3.4 Chemical Spoilage	9
2.4 Preservation of Fish and Fish Products	10
2.5 Evaluation of Fish and Fish Products quality	12
2.5.1 Sensory Evaluation	12
2.5.1.1 Quality Index Method(QIM)	13
2.5.1.2 European Scheme	14
2.5.2 Microbiological Methods	14
2.6 Microbial Contaminates On Fish Associated With Foodborne	15
2.6.1 Salmonellosis	16
2.6.2 Vibrio Cholera	17
Chapter Three Materials and Methods	

3-1 Study Area	19
3.2 Fish Sample Collection	19
3.3 Sensory Analysis	19
3.4 Microbial Analysis:-	20
3.4.1 Materials	20
3.4.2 Enumeration and Isolation of Bacteria	20
3-4-2-1 Preparation of Broth agar	20
3-4-2-2 Preparation of Nutrient agar	20
3-4-2-3 Preparation of Salmonella/Shigella agar	21
3-4-2-4 Preparation of Blood agar	21
3-4-2-5 Preparation of Sample	21
3-4-2-6 Preparation of Serial Dilutions	21
3-4-2-7 Total Viable Count (TVC)	21
3-4-2-8 <i>Salmonella</i> Isolated	22
3-4-2-9 <i>Vibrio Cholera</i> Isolated	22
3-5-Statistical Analysis	22
Chapter Four Results	
4.1 Results Of Sensory Evaluation	23
4.2 Microbial Result	25
Chapter Five Discussion	
Discussion	26
Conclusion and recommendation	
Conclusion	28
Recommendation	28
Chapter six References	
References	30
Appendixes	

List of Tables

Contents	Page No
Table 1. Descriptive statistics of sensory evaluation of <i>Oreochromis niloticus</i> fish.	23
Table 2. Descriptive statistics of sensory evaluation of <i>Bagrus spp</i> fish.	23
Table 3. Shows comparison between <i>Oreochromis spp</i> and <i>Bagruss spp</i> in regard of sensory evaluation at fish distribution center in Al-Damer city. <i>sp</i>) From Al-Damer Fish Market.	24
Table (4). Total Viable Bacterial Count (TVC) in the studied fish <i>spp</i>	25
Table(5). Shows the pathological bacteria isolated and identified from the skin and gills of chilled fish (<i>Oreochromis sp</i> and <i>Bagrus sp</i>) from the fish distribution center in Al-Damer city.	25

List of Appendix

Contents	Page No
Appendix (1) Shows the sampling plan and recommended microbiological limits for sea food (ICMSF 1986).	38
Appendix (2) Shows the European scheme used for inspection of the studied fish <i>spp</i> at the fish distribution center in Al-Damer city.	39
Appendix (3) Shows Sensory Evaluation of <i>Bagrus spp</i> Gills at the fish distribution center in Al-Damer city.	40
Appendixes (4) Shows Swap Sample From <i>Oreochromis spp</i> Gills at the fish distribution center in Al-Damer city.	41
Appendixes (5) Shows Swap Sample From <i>Bagrus spp</i> at the fish distribution center in Al-Damer city.	42

Abstract

The present study was conducted during the period from (January to March 2019) to evaluate the sensory characteristic and microbiological quality of chilled fish species (*Oreochromis niloticus* and *bagrus Bayad*) at the fish distribution center in Al-Damer City. In this study fish were classified into four categories depending on the freshness; excellent quality (E), very good grade (A), good grade (B) and undesirable grade (C). Hundred samples were taken randomly from the fish distribution center in Al-Damer City, (50) samples from each species drawn from 6 tons were inspected according to (European scheme), and a total of (20) swabs samples were obtained, (10) samples from each species for microbial analysis. The result found that there was No significant difference in sensory evaluation between chilled fish species (*Oreochromis niloticus* and *Bagrus bayad*). As the average skin of fishes at respectively (1.98 ± 0.89 and 1.98 ± 0.91) outer Slime (1.96 ± 0.86 and 2.04 ± 0.83) eyes (1.88 ± 0.75 and 1.84 ± 0.87) gill Color (2.10 ± 0.74 and 2.20 ± 0.83) peritoneum (1.80 ± 0.70 and 2.08 ± 0.92) and gill odour (1.74 ± 0.80 and 1.94 ± 1.04). The results indicate No significant difference in total bacterial count from the studied spp. The total number of bacterial load for both chilled fish *Oreochromis niloticus* and *Bagrus bayad* were ($4.5 \times 10^5 \pm 0.14 \times 10^5$, $4.1 \times 10^5 \pm 0.09 \times 10^5$) cf/g respectively. In this study specific fish pathogens were investigated such as *salmonella sp* and *vibrio cholera*, and had found that *salmonella sp* dominated on the sample inversely than *vibrio cholera* which was absent in all studied samples under investigation. Finally it can be concluded that the investigated chilled fishes in this time had acceptable sensory and microbial quality thus it is safe for human consumption.

الخلاصة

تم اجراء هذه الدراسة خلال الفترة من يناير الى مارس 2019م لتقييم السمات الحسية والجودة الميكروبيولوجية لأنواع الأسماك المبردة (البلطي والبياض) في مركز توزيع الأسماك في مدينة الدامر .

في هذه الدراسة تم تصنيف الأسماك الى اربع فئات حسب نضارة الأسماك وطزاجتها وهي الأولى ذات الجودة الممتازة ،الثانية جيدة جدا ،الثالثة مقبولة والثالثة غير صالحة للاستهلاك الأدمي .

اجريت هذه الدراسة على مائه عينة تم اخذها عشوائيا من مركز توزيع الأسماك في مدينة الدامر (50) عينة من كل نوع مأخوذة من 6 طن خضعت للتفتيش باستخدام النظام الأوربي ،وايضا تم أخذ 20 مسحه ميكروبيه عشرة من كل نوع من الأسماك لإجراء الفحص الميكروبي . أظهرت النتائج انه لا يوجد فرق معنوي في التقييم الحسي بين أنواع أسماك البلطي والبياض ،حيث كانت النتائج على التوالي متوسط الجلد على التوالي (1.98±0.91،1.98±0.89) ثم المخاط (1.96±0.86، 2.04±0.83) العيون (1.88±0.75،1.84±0.87) لون الخياشيم (2.10±0.74، 2.20±0.83) التجويف البطنى(1.80±0.70،2.08±0.92) ورائحه الخياشيم (1.74±0.80،1.94±1.04) . العدد الكلي لحمل الميكروب للأسماك تحت الدراسة البلطي والبياض (4.5 × 10⁵ ± 0.14 × 10⁵ و 4.1 × 10⁵ ± 0.09 × 10⁵) على التوالي، حيث تشير النتائج أنه لا يوجد فرق معنوي بين الأنواع المدروسة من حيث العد الكلي للبكتريا .

في هذه الدراسة تم التحقق من وجود مسببات الأمراض المحددة مثل السالمونيلا والفييرو كوليرا ، حيث وجد ان السالمونيلا هي التي تسيطر على معظم العينات تحت الدراسة بينما الفييرو كوليرا لم تبدي بالظهور في كل العينات تحت الدراسة .

وبصورة عامة يمكن استنتاج ان الأسماك المبردة في هذا الوقت في مركز توزيع الأسماك في مدينة الدامر ذات جودة حسيه وميكروبية مقبولة وبالتالي هي امنة للاستهلاك الأدمي .