

Research Lab Sheet

Lab Name	Invertebrates
Academic Year	2021 - 2022

Basic Information	
Department	Zoology
Location	Eastern corridor
Total area (m ²)	64 m ²
Head of the Lab	Prof. Dr. Fathy El. Soliman
Establishment date	1/10/1975

Lab Members				
No. of Prof.	No. of Ass. Prof.	No. of Lect.	No. of Ass. Lect. & Demonst.	No. of technicians
4	1	2	3	0

Staff members					
#	Name	Scientific degree	e-mail	Specializations	C.V (Link of homepage)
1	Fathy E. Soliman	Prof.		Ecology	
2	Somia A, Ramadan	Prof.	somaiaaramadan@yahoo.com	Invertebrate Zoology	
3	Alaa Y. Moustafa	Prof.	alaayoussry2000@gmail.com	Invertebrate Zoology	
4	Tarek G. Ismail	Prof.	t_gad_2000@science.sohag.edu.eg	Invertebrate Zoology	http://staffsites.sohag-univ.edu.eg/cv/508?p=cv
5	Ebtesam A. Yousif	Ass. Prof.	ebtesam_yousif@science.sohag.edu.eg	Invertebrate Zoology	
6	Safa M. El-Masry	Lecturer	safa_elmasry@yahoo.com	Invertebrate Zoology	
7	Asmaa N. Mustafa	Lecturer	a_n_19888@yahoo.com	Invertebrate Zoology	
Ass. Lecturers & Demonstrators					
#	Name	Scientific degree	e-mail	Specializations	C.V (Link of homepage)
1	Olfat T. Mohamed	Ass. Lecturer	lolo205063@yahoo.com	-	-
2	Amal Mokhtar Mohamed	Ass. Lecturer	Amal.mokhtar.zoology@gmail.com	-	-
3	Ali A. Abdel Rahman	Demonstrator	aliahmed19972017@gmail.com	-	-

Theses produced by the Lab

M. Sc. Theses

#	Title	Approval date
1	A special topic on some species of fresh water mites.	1979
2	Morphological studies on a marine bivalve species in Egypt <i>Modiolus auriculatus</i> Karauss 1848).	1983
3	Taxonomical and ecological studies on some fresh water mites collected from the Nile at sohag.	1992
4	Biological studies on <i>Dosinia radiate</i> (Mollusca : Bivalvia) lives in the Egyptian water.	1993
5	Biological studies on some marine venomous animals and the physiological effects of their venomus on the living cells.	1995
6	Biological studies on a species of the genus <i>Parhyale</i> (Crustacea:Amphipoda) from the Red Sea in Egypt.	1997
7	Biological studies on some species of sea hares (Mollusca:Opithobranchia) collected from the Red Sea, Egypt.	2002
8	Biological studies on some cnidarians of the Red Sea, Egypt	2007
9	Studies on taxonomic and morphology of marine ostracods (Crustacea) in the Red Sea, Egypt.	2003
10	Interactions between some parasites and their aquatic hosts.	2008
11	Biological and toxicological studies on <i>Octopus vulgaris</i> from the Red Sea, Egypt.	2009
12	Morphological studies on some species of aquatic mites in Sohag Governorate.	2011
13	Ecological studies on a rocky sandy habitat on the North Western part of the Red Sea, Egypt.	2013
14	Biological aspects on family Pleurobranchidae on the west north coast of the Red Sea, Egypt.	2014
15	Systematic and population studies on a species of water mites (Genus <i>Unionicola</i>) parasitizing on fresh water mussels.	2015
16	Ecological studies on some River Nile mussel species (Mollusca: Bivalvia) at Sohag Governorate, Egypt.	2019
17	Biological studies on some species of freshwater ostracods, Sohag, Egypt.	2021

Ph.D. Theses		
1	Biological studies on some aquatic parasitic mites.	1995
2	Biological and biochemical comparative studies on some venomous animals of the Red Sea and Atlantic Ocean.	2000
3	Biological studies on some crustaceans from the North-western part of the Red Sea, Egypt.	2003
4	Studies on biology and chemical defense of some marine invertebrates, Red Sea, Egypt.	2005
5	Biological studies on some ostracod species from the Red Sea, Egypt.	2008
6	Biological and Ecological Topics on some Spider Species at Sohag Governorate, Egypt.	2020
7	Morphological and Ecological Studies on Some Aquatic Mites in Sohag, Egypt.	2020

Articles produced by Lab members	
#	Title
1	Mohamed, A. H. and F. El. Soliman (1979). Prostigmatic fresh water mites (Acari) in sohag. I. Teyranchoid mites. Bull.Fac. Sci., Assiut Univer., 8 (2), p-p.51-61.
2	Mohamed, A. H. and F. El. Soliman (1979). Prostigmatic fresh water mites in Sohag. II. Chyletoid mites. Bull. Fac. Sci. Assiut Univ., 8(2). P-P, 51-61.
3	Fathy, El. Soliman and T.kikuchi, (1988). Aspects on the population dynamics of the Japanese sea star <i>Asterina minor</i> Hayashi. Abundance and annual and seasonal changes in the density of the sea star. Bull. Fac. Sci., Assiut Univ. 17(1-E), P-P.77-91.
4	Fathy, El. Soliman (1989). Studies on the Egyptian Echinodermata. <i>Ophiocoma latilanaxa</i> (Ophiuroidea: Ophiocomidae). A new record from the red sea. Bull. Fac. Sci., Assiut Univ., 18 (2-E), PP. 97-105, 1989.
5	Fathy, El. Soliman (1990). <i>Ophiocoma schoenleini</i> , <i>Ophiocoma anaglyptica</i> and <i>ophiocoma /af/Va/jaxa</i> (Ophiuroidea:Echinodermata) anew record from the red sea with some notes on the other related species. Assiut Vet. Med.Vol. 23(46):1991.
6	Fathy, El. Soliman and T.N. Habib., (1990). Studies on <i>Acanthopleura gemmata</i> , the common rock chiton species in the northwestern Red Sea. (Mollusca: polyplacophora). Bull. Fac. Sci. Assiut Univ. 19 (1-E): 55-70.
7	Fathy, El. Soliman. (1991). Studies on the Egyptian Echinodermata: <i>Ophiocoma aegyptiaca</i> sp. Nov. (Ophiuroidea: Echinodermata) from the red sea. Galaxea, 10: 79-88.
8	Fathy, El. Soliman; M.A. Hussein and S. Ramadan (1991). The nervous system and sensory organs of <i>Linohia nilotica</i> an acarid mite (Acaridida: Acarina). From the Nile. Bull.Fac. Sci., Assiut Univ. 20(1-E):29-37.
9	Fathy, El. Soliman; M.A. Hussein and S. Ramadan (1991). Description of four species belonging to genus <i>Linobia</i> (family Linobiidae:Acari) from the Nile. Bull.Fac.Sci., Assiut Univ. 20(2-E):13-28.
10	Fathy, El. Soliman (1991). Spatial pattern and inter-locality variations of adults and juveniles of common Red Sea echinoid <i>Echinometra mathaei</i> (Echinoidea: Echinodermata). Bull. Fac. Sci., Assiut Univ., 20(2-E)., pp. 235-251.
11	Fathy, El. Soliman (1992). Suspension feeding and functional morphology in the brittle star, <i>Ophiocoma scolopendrina</i> (Ophiuroidea: Echinodermata) Bull. Fac. Sci., Assiut Univ. 21(1-E): 1-18.
12	Fatma, A; A. H. Omar F. El. Soliman and A. Kdhedre. Mating behaviour of <i>Wohlfartia nuba</i> (Diptera: Sarcophgidae). Bull. Ent. Soc. Egypt. 70:225-231.
13	Fathy, El. S; F. Adham A. H. Omar and A.Khedre, (1992). the effect of food on adult longevity and sex maturation in <i>Wohlfartia nuba</i> . Bull. Ent. Soc. Egypt. 70.pp 217-224.
14	Aziza, H. O; F. Adham, F. E. Soliman and A. Kdedre (1992). Laboratory rearing of <i>Wohlfartia nuba</i> Wiedmann (Oeptera:Sarcophagidae) in Egypt, J. Egyptian Society of Parasitology. 22(1):271-278.

15	Fathy, El. S., M. A. Hussien, A. Almaraghy and T. Habib (1996). Population structure and life history of <i>Acanthopleura gemmate</i> (Mollusca: Polyplcophora). In the north western coast of the Red Sea, Al-Manarah, 1(3).
16	Aboul-Dahab H. M., Hussein M. A. and Ramadan S. A. (1996). Parental care and brood protection in the parasitic water mite <i>Unionicola anodontae</i> n. sp. Bull. Fac. Sci., Assiut Univ. 25(2-E): 11-21.
17	Aboul-Dahab H. M., Hussein M. A. and Ramadan S. A. (1997). Population dynamics of <i>Unionicola anodontae</i> n. sp. associated with the molluscan host, <i>Anodonta rubens</i> . in the River Nile, Egypt. Bull. Fac. Sci. Assiut Univ., 26(1-E): 33-60.
18	Aboul-Dahab H. M., Hussein M. A. and Ramadan S. A. (1997). Reproductive system and embryogenesis of the water mite <i>Unionicola anodontae</i> (Acari: Prostigmata). Bull. Fac. Sci. Assiut Univ., 26(1-E): 1-31..
19	Ramadan, S. A. (1997). Two new species of mesostigmatid mites (Acari) associated with sponges from the Red Sea, Egypt. Assiut Vet. Med. J. 38(75): 191-204.
20	Fathy, El. S., M. A. Hussien and S. Ramadan (1998). Distribution and abundance of some Nile water mites species (Arachnida : Acarina) and a biotic factors affecting them . Bull. Fac. Sci. Assiut Univ. 27(2E):1- 19 .
21	Aboul-Dahab, H. M., Hussein, M. A., and Ismail, T. G. (1998): Functional morphology of the digestive of the marine amphipod <i>Parhyale hawaiiensis</i> from the Red Sea, Egypt. Bul. Fac. Sci. Assiut Univ., 27(1-E): 59-80.
22	Ramadan, S. A. (1998). Allometry of brooding in the freshwater mite <i>Parafissicepheus africanus</i> Mazen, 1979 (Acari: Cryptostigmata). Egypt. J. Zool., 30: 327-336.
23	Ramadan, S. A. (1998). On the respiratory system of three species of mesostigmatid mites, in the River Nile, Egypt. Egypt. J. Zool., 31: 67-79.
24	Aboul-Dahab, H. M., Hussein, M. A., and Ismail, T. G. (1998): The reproductive system, development and hatching of <i>Parhyale hawaiiensis</i> (Crustacea:Amphipoda) from the Red Sea, Egypt. Bul. Fac. Sci. Assiut Univ., 27(1-E): 25-38.
25	Aboul-Dahab, H. M., Hussein, M. A., and Ismail, T. G. (1998): Morphology of oostegites and brooding habits in the marine amphipod <i>Parhyale hawaiiensis</i> . Assiut Vet. Med. J., 39(77): 179-191.
26	Fathy, El. S., M. A. Hussien and S. Ramadan (1999). Population ecology of five water mites species (Arachnida : Acarina) from the Nile at Sohag governorate, Upper Egypt . Bull. Fac. Scie. Assiut Univ. 28(1-E): 53- 74
27	Aboul-Dahab, H. M., Hussein, M. A., and Ismail, T. G. (1999): The nervous system and sense organs of the marine amphipod <i>Parhyale hawaiiensis</i> from the Red Sea, Egypt. Bul. Fac. Sci. Assiut Univ., 28(1-E): 1-11
28	Fathy, El. S. and M. A. Abdel-Moati (1999). Base line ecological survey around the Qatarlan petroleum production station number two (PS-2) in the Arabian Gulf. Bull. Fac. Scie. Assiut Univ. 28(2-E): 1- 28.
29	Fathy, El. S. and M. A. Abdel-Moati (1999). Ecological survey around the Qatari petroleum production station number three (PS-3). Bull. Fac. Sci. Assiut Univ. 28(2-E): 47- 73.
30	Ramadan, S. A. (1999). Abundance and sex ratio of four species of freshwater mites (Acari) from roots of the aquatic plant, <i>Eichhorina crassipes</i> . Egypt. J. Zool., 33: 65-76.

31	Ramadan, S. A. and Aboul-Dahab H. M. (1999). Sexual dimorphism in three freshwater mite species (Acari: Unionicolidae). Bull. Fac. Sci., Assiut Univ., 28(1-E): 101-118..
32	Aboul-Dahab H. M. and Ramadan S. A. (1999). The relationship between adult size and brooding of embryos in <i>Palaemon debilis</i> (Crustacea: Decapoda), Red Sea, Egypt. Bull. Fac. Sci., Assiut Univ., 28(1-E): 119-125.
33	Ramadan, S. A. and Aboul-Dahab, H. M. (1999). Life history of freshwater mite <i>Unionicola niloticus</i> (Unionicolidae) parasitizing on the molluscan host, <i>Anodonta rubens</i> . Bull. Fac. Sci., Assiut Univ., 28(2-E): 141-158.
34	Fathy, El. S., M. A. Hussien and T. N. Habeeb (2000). Horizontal and vertical distribution of the common rock chiton <i>Acanthopleura gemmate</i> (Mollusca: Polyplcophora) in the international zoon of the north western coast of the Red Sea. Proc. I. C. B. S., 1(2): 513-522.
35	Azza, M.K., Fathy El. S., Aziza, H. O and N. M. Hasaneen, 2000. Histological changes in the developing ovary of the blowfly 4 (FABR) related to adult protein diet. Egypt. J. Zool., 35:309-339.
36	Ramadan, S. A. and Aboul-Dahab, H. M. (2000). Tissue damage and internal defence reactions to the molluscan host <i>Anodonta rubens</i> infected by the water mite <i>Unionicola niloticus</i> . J. Egypt. Ger. Soc. Zool., 33(D): 19-30.
37	Aboul-Dahab, H. M., Ramadan, S. A., Hussein, M. A., and Moustafa, A. Y. (2000). Reproductive system of sea hares, <i>Dolabrifera dolabrifera</i> and <i>Aplysia dactylomela</i> (Mollusca: Opisthobranchia) collected from the Red Sea, Egypt. Bull. Fac. Sci., Assiut Univ., 29(1-E): 1-21.
38	Fathy, El. S., (2001). On the ecological factors affecting reproductive patterns in Allopatric populations of <i>Tripneutes gratilla</i> and <i>Echinometra maf/ae</i> (Echinodermata: Echinoidea) in the Northwestern coast of the red sea. Egypt. J. Zool., 36:27-47.
39	Fathy, El. S. (2001). Population dynamics and life history traits of the sea Urchin <i>Diadema setosum</i> (Leske) (Echinoidea: Echinodermata) in the northwestern coast of the red sea. Egypt. J. Zool., 36:329-351
40	Aboul-Dahab, H. M., Hussein, M. A., and Ismail, T. G. (2001): Reproductive aspects on the peracarid crustaceans <i>Leptochelia erythraea</i> and <i>Cyproidea ornata</i> , from the Red Sea, Egypt. Bull. Fac. Sci., Assiut Univ., 30(1-E): 23-36.
41	Aboul-Dahab, H. M., Ramadan, S. A., Hussein, M. A., and Moustafa, A. Y. (2001). Functional morphology of the digestive system of sea hares, <i>Dolabrifera dolabrifera</i> and <i>Aplysia dactylomela</i> , Red Sea, Egypt. Bull. Fac. Sci., Assiut Univ., 30(1-E): 1-22.
42	Ramadan, S. A. and Aboul-Dahab, H. M. (2002). Scanning electron microscopic study of two new species of water mites collected from unionid mussels in Egypt. J. Egypt. Ger. Soc. Zool., 37(D): 9 -22.
43	Ramadan, S. A. (2002). Two new species of rheophilic water mites (Hydrachnellae: Arrenuridae) collected from the River Nile at Sohag, Upper Egypt. J. Egypt. Ger. Soc. Zool., 37(D): 23-39.
44	Ramadan, S. A. (2002). On the distribution and population density of the water mite <i>Unionicola tetrafurcatus</i> inside two molluscan hosts from the River Nile, Sohag, Egypt. Egypt. J. Zool., 39: 541-559.

45	Ramadan, S. A. (2003). A comparison of the population structure of the water mite <i>Unionicola tetrafurcatus</i> inside two molluscan hosts from the River Nile, Egypt. Egypt. J. Zool., 41: 229-247.
46	Ramadan, S. A. (2003). On the occurrence of a protozoan parasite inside the water mite <i>Unionicola anodontae</i> with emphasis on histopathological changes of the host. J. Egypt. Ger. Soc. Zool., 40(D): 101-113.
47	Ramadan, S. A. (2003). Spermatogenesis and sperm structure in the water mite <i>Unionicola tetrafurcatus</i> (Unionicolidae) with remarks on the male reproductive system. J. Egypt. Ger. Soc. Zool., 42(D): 11-25.
48	Ramadan, S. A. (2004). Description of epibiont ciliates on the water mite <i>Unionicola tetrafurcatus</i> and their distribution on the host legs. Egypt. J. Zool., 42: 97-112.
39	Ramadan, S. A. (2004). Numerical taxonomic studies of some aquatic mites collected from the River Nile and Red Sea, Egypt. Egypt. J. Zool., 43: 257-275.
50	Hussein, M. A., Ramadan, S. A., Aboul-Dahab, H. M. and Moustafa, A. Y. (2004). Functional morphology of the venom systems <i>Conus sanguinolentus</i> and <i>C. catus</i> (Gastropoda: Conidae) and the toxicity of their venoms. Bull. Fac. Sci., Assiut Univ., 33(1-E): 45-67.
51	Ramadan, S. A. (2005). Ultrastructure of haemocytes in the water mite <i>Unionicola tetrafurcatus</i> (Acari: Unionicolidae) with reference to their role in phagocytosis. Assiut Univ. G. Zool., 34(1): 1-9.
52	Ismail, T. G. and Aboul-Dahab, H. M (2006): Qualitative and quantitative aspects of some invertebrate communities inhabiting different marine habitats, Red Sea, Egypt. Bull. Fac. Sci., Assiut Univ., 35(2): 89-114.
53	Moustafa A. Y. and Abu-Dief, E (2007): Ultrastructural study on the effect of ink fluid of the sea hare <i>A. dactylomela</i> on mice hepatocytes and kidney tubules of male mice. J. Egypt. Soc. Biotech. Environ. Sci. 10 (A):235-263.
54	Moustafa A. Y. (2009): Numerical taxonomic studies of some species of sea hares (Opisthobranchia: Anaspidea: Aplysiidae) from the Red sea Egypt. Egypt. J. Zool., 52: 33-50.
55	Moustafa, A. Y Aboul-Dahab, H. M. Ramadan, S. A., and Hussein, M. A. (2009): Fine structure of the digestive glands of sea hares <i>Aplysia oculifera</i> and <i>Aplysia fasciata</i> with references to their bioactive effects. Assuit. Univ. J. Zool. Spec. Publ. (2): 75-94.
56	Ismail, T. G. (2010): Distribution and shell selection by two hermit crabs in different habitats on Egyptian Red Sea Coast. Acta Oecologica, 36(3): 314-324.
57	Moustafa, A. Y., Obuid- Allah, A. H., Aboul-Dahab, H. M. and Ali AbdelReheim A. (2010): Anatomical and histological studies on the digestive tract of <i>Octopus vulgaris</i> Cuvier, 1797, from the red sea, Egypt. Egypt. J.Zool. 55:141-165
58	Moustafa, A. Y. and Ibraheem, A.S. (2010): Heat shock protein 70 expression and apoptotic DNA fragmentation induced by the ink fluid of the sea hare <i>Aplysia oculifera</i> on male mice. J. Egypt. Ger. Soc. Zool. (60A): 1-19.
59	Ebtesam, A. Y. (2010): Taxonomy and description of the female <i>Candonocypris novaezelandiae</i> (Baird, 1843) (Crustacea: Ostracoda) from River Nile, Sohag Governorate, Egypt. Egypt. Acad. J. biolog. Sci., 2 (2): 61-69.

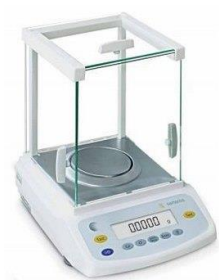
60	Hegazy M. F., El-Beih, A. A., Moustafa, A. Y. Hamdy, A. A., Alhammadye, M. A., Selim R. M. Abdel-Rehim, M. and Paré, P. W (2011): Cytotoxic cembranoids from the Red sea soft coral <i>Sarcophyton glaucum</i> . J. Nat. Prod. Comm. 6 (12): 1809-1812
61	Ismail, T. G. (2011): Coexistence of two haplosporidian parasites in a population of the marine amphipod <i>Parhyale hawaiensis</i> with evidence for parasite phagocytosis and transmission mode. J. Egypt. Soc. Parasitol., 41 (1): 223 – 236
62	Ismail, T. G. (2011): Behavioural activities of five hermit crabs from Egyptian Red Sea Coast. J. Egypt. Ger. Soc. Zool., 63(D):153-179.
63	Ismail, T. G. (2012): Effects of competitive ability and shell resource value on the outcome of fighting contests of the Red Sea hermit crab, <i>Calcinus latens</i> . J. Egypt. Ger. Soc. Zool., 64(D):201-219.
64	Ismail, T. G. (2012): Effects of visual and chemical cues on orientation behaviour of the Red Sea hermit crab <i>Clibanarius signatus</i> . J. Egypt. Ger. Soc. Zool., In Press.
65	Soliman, F.E., Ismail, T.G., Ebtesam, A.Y. and Abdel aziz, M.E. (2012): Population biology of the benthic tanaid <i>Leptochelia erythraea</i> (Crustacea, Peracarida, Tanaidacea) inhabiting a sandy-rocky habitat on the North-Western Coast of the Red Sea, Egypt. Bul. Fac. Sci. Assiut Univ., 41(2):45-66.
66	Ramadan, S.A., Mohamed, A. H. and Fathy, W. A. (2012). <i>Eutetracychus furcatus</i> (Acari: Tetranychidae) from Sohag, Egypt. Sohag Bulletin of pure and applied science, 14: 97-116
67	Moustafa, A. Y. and Mohamed D. S. (2012): Histological and immunohistochemical effects of the ink fluid of the sea hare <i>Aplysia dactylomela</i> on splenic macrophages of mice. J. Egypt. Ger. Soc. Zool. (64D): 1-16. 2012.
68	Soliman, F.E., Mostafa, A.Y., Ismail, T.G. and El Masry, S. (2013): Redescription and some ecological traits of Three Pleurobrach Species (Mollusca: Gastropod) inhabiting the North- Western Coast of the Red Sea, Egypt. Assiut Univ. J. Zoology, 42 (2):27-57.
69	Ebtesam, A. Y. (2013): Sex ratios and seasonal changes in density of four ostracod species in relation to some ecological variables, Red Sea, Egypt. The Egyptian Journal of Aquatic Research. 40: 425-433.
70	Ramadan, S. A., Ismail, T.G. and Abdellah, M.A (2014): Histopathological study on a freshwater mussel, <i>Caelatura aegyptiaca</i> , infected by a haplosporidian parasite. Assiut Univ. J. Zoology, 41(2):45-66.
71	Mostafa, A.Y., Soliman, F.E., Ismail, T.G. and El Masry, S. (2014): Color Polymorphism in the Sea Slug <i>Berthellina citrina</i> (Rüppell and Leuckart, 1828) (Heterobranchia: Notaspidea: Pleurobranchidae) from the Red Sea. International Journal of Advanced Research, 2(11):1127-1147
72	Mohamed-Elamir F. Hegazy, Alaa Y. Moustafa, Abou El-Hamd H. Mohamed, Montaser A. Alhammady, Serag- Eldin I. Elbehairi , Shinji Ohta, Paul W. Paré (2014). New cytotoxic halogenated sesquiterpenes from the Egyptian sea hare, <i>Aplysia oculifera</i> . Tetrahedron Letters 55: 1711–1714.
73	Alaa Y. Moustafa Heike Wägele and Serag Eldin I. El behairi (2014). Toxicological and Biological Activities of the Acid Secretion of <i>Berthellina citrina</i> (Heterobranchia, Pleurobranchioidea) from the Red Sea. International Journal of Advanced Research. 2(8):13-24.

74	Ramadan, S.A., Ismail, T.G. and Mustafa, A.N. (2015): A new species of parasitic water mite, <i>Unionicola aegyptiaca</i> (Acari: Unionicolidae) collected from Freshwater Mussel, Sohag, Egypt. <i>Assiut Univ.J. Zoology</i> , 44 (1):1-17.
75	Adham, F.K., Khedre, A.M., Ismail, T.G., El-Araby, M., Abu ElEla, S.A.A., ElSayed, W.M. (2016): Buccal deformities in chironomid larvae (Diptera: Chironomidae) as an indicator risk assessment and anthropogenic stresses of pollution in fresh water of the River Nile, Sohag Governorate, Egypt. <i>J. Bio. Env. Sci.</i> , 8(6) 37-48.
76	Ramadan, S.A., Hassan, A.H; Asran, A.A and Abd Elgwad, EF (2016). Histopathological study on rodent small intestine infected with an adult tapeworm, <i>Hymenolepis diminuta</i> . <i>Journal of Environmental Studies [JES]</i> , 15: 11-18.
77	Soliman, F.E., Mostafa, A.Y., Ismail, T.G. and Mohamed O.T. (2016): Reproductive cycle, gametogenesis and embryonic development of <i>Nitia teretiuscula</i> (Bivalvia:Unionidae), from the River Nile, at Sohag Governorate, Egypt. <i>Egypt. J. Zool.</i> , 66:115-138. https://doi.org/10.12816/0034713
78	Aziz Awaad and Alaa Y. Moustfa (2016). Immunotoxicity of skin acid secretion produced by the sea slug <i>Berthellina citrina</i> in mice spleen Histological and Immunohistochemical study. <i>Acta Histochemica</i> 118 :596–605.
79	Alaa Y. Moustfa and Aziz Awaad (2016). Comparative histopathological and histochemical impacts induced by the posterior salivary gland and ink sac extracts of <i>Octopus vulgaris</i> in mice. <i>The Journal of Basic & Applied Zoology</i> , 74: 23–36.
80	Alaa Y. Moustafa , Haleh Golestani and Ángel Valdés (2016). A review of the genus <i>Berthellina</i> (Mollusca: Heterobranchia: Pleurobranchidae) in the Red Sea based on molecular and anatomical data. <i>Marine biodiversity</i> , https://doi.org/10.1007/s12526-016-0558-2
81	Adham, F.K., Khedre, A.M., Ismail, T.G., El-Araby, M., Abu ElEla, S.A.A., ElSayed, W.M. (2016): Buccal deformities in chironomid larvae (Diptera: Chironomidae) as an indicator risk assessment and anthropogenic stresses of pollution in fresh water of the River Nile, Sohag Governorate, Egypt. <i>J. Bio. Env. Sci.</i> , 8(6) 37-48.
82	Khedre, A.M., Ismail, T.G., Yousif, A.A. and Hashem, G. A. (2017): Pathogenic bacteria carried by synanthropic filthy flies (<i>Musca</i> species) at farmed animals in Sohag Governorate, Egypt 2-Percentage of bacterial infection in <i>Musca</i> species. <i>Egypt. J. Zool.</i> , 68:23-36. https://doi.org/10.128816.0043179
83	Ramadan, S.A., Ismail, T.G. and Mustafa, A.N. (2017): A new aquatic oribatid mite, <i>Trimalaconthrhus crassipes</i> n. sp. (Family: Malaconothridae), Sohag, Egypt. <i>Assiut Univ. J. Zoology</i> , 46(2):26-39.
84	Heike Wägele, Kristina Knezevic and Alaa Y. Moustafa (2017). Distribution and morphology of defensive acid-secreting glands in Nudipleura (Gastropoda: Heterobranchia), with an emphasis on Pleurobranchomorpha. 83(4):422–433. doi:10.1093/mollus/eyx030 .
85	Mona F. Abou-Elezz, Alaa Y. Moustafa and Mohamed S. El-Naggar, (2017). Assessment of Biochemical and Histopathological Effects of Crude Venom of Cone Snail <i>Conus flavidus</i> on albino Mice. <i>International Journal of Ecotoxicology and Ecobiology</i> , 2(1):33-44.

86	Ebtesam A. Y., Alaa Y. M. (2017): The ontogeny of appendages and carapace of <i>Neonesidea schulzi</i> (Ostracoda: Bairdiidae) from the Red Sea coast, Egypt. Invertebrate Reproduction & Development. Vol. 61, NO. 4, 225–244.
87	Ebtesam A. Y., Mahmoud H. H. (2017): Evaluation of Two Novel Feeding Protocols Utilizing Alive and Dried <i>Chlorella vulgaris</i> to Grow <i>Heterocypris salina</i> (Ostracoda: Crustacea). Journal of Zoological Research Volume 1, Issue 1, 2017, PP 10-15.
88	Ramadan, S.A., Ismail, T.G. and Mustafa, A.N. (2018): Histological and ultrastructural studies of spermatogenesis of freshwater mite, <i>Unionicola aegyptiaca</i> (Acari, Unionicolidae). Egypt. J. Zool., 69: 191-206. https://doi.org/10.12816/0049670
89	Ramadan, S.A., Ismail, T.G. and Mustafa, A.N. (2018): description of two new species of aquatic oribatid mites (Family: Malaconothridae, Genus: Malaconothrus) from Sohag Governorate, Egypt. Egypt. J. Zool., 70: 91-110. https://doi.org/10.21608/EJZ.2018.27157
90	Soliman, F.E., Ismail, T.G., Mostafa, A.Y. and El Masry, S. (2018): Studies on the abundance, temporal distribution and diversity of spiders (Arachnida: Araneae) associated with lemon trees, Sohag Governorate, Egypt. Journal of ecology of Health & Environment, 6(3):107-120. https://doi.org/10.18576/jehe/060302
91	Soliman, F.E., Mostafa, A.Y., Ismail, T.G. and El Masry, S. (2018): Spiders (Arachnida: Araneae) of Jazirat Shandweel District, Sohag Governorate, Egypt. Serket, 16(3): 133-160.
92	Ismail, T. G. (2018): Effect of geographic location and sexual dimorphism on shield shape of the Red Sea hermit crab <i>Clibanarius signatus</i> using geometric morphometric approach. Can. J. Zool., 96: 667-679. https://doi.org/10.1139/cjz-2017-0050
93	Fawzia S. Ali, Ebtesam A. Yousef, Mahmoud H. Hegab and Nehad Khalifa (2018). Morphological re-description and molecular characterization of <i>Heterocypris salina</i> (Brady, 1868), a new recorded ostracod species in Egypt. Egyptian Journal of Aquatic Biology & Fisheries. 22(3): 37- 54
94	Ebtesam A. Yousef. (2018): Distribution and Taxonomy of Shallow Marine Ostracods from the Western Coast of the Red Sea, Egypt. Open Journal of Marine Science, 8: 51-75.
95	Soliman, F.E., Mostafa, A.Y., Ismail, T.G. and Mohamed O.A. (2019): Local and temporal distributions and a new dispersal phenomenon of the freshwater mussel <i>Nitia teretiuscula</i> (Bivalvia: Unionidae) in the River Nile at Sohag Governorate, Egypt. Journal of ecology of Health & Environment, 7(3): 1-8. https://doi.org/10.18576/jehe/070301
96	Ramadan, S.A., Ismail, T.G. and Mustafa, A.N. (2019): Studies on the cuticle and musculature of freshwater mite, <i>Unionicola aegyptiaca</i> . The Journal of Basic and Applied Zoology, 80:66 (8 pp.). https://doi.org/10.1186/s41936-019-0133-z
97	Ismail, T.G. (2021): Seasonal shape variations, ontogenetic shape changes, and sexual dimorphism in a population of land isopod <i>Porcellionides pruinosus</i> : a geometric morphometric study. The Journal of Basic and Applied Zoology 82:13 (15 pp.). https://doi.org/10.1186/s41936-021-00209-y
98	Ismail, T.G. (2021): A geometric morphometric analysis of heterochely in the Red Sea hermit crab <i>Clibanarius signatus</i> and its developmental stability and modularity. Egypt. J. Zool., 76:30-51. https://doi.org/10.21608/ejz.2021.77508.1056

Lab instruments						
#	Device	quantity	Quality			
			Good	Poor	Need maintenance	malfunction
1	Desk top Computer	2	✓			
2	Dissecting microscopes	5	✓			
3	Research microscope	3	✓			
4	Research microscope with digital camera	2	✓			
5	Hot air Oven	1	✓			
6	Incubators	2	✓			
7	Digital balance	1	✓			
8	Hot Plate	1	✓			

Instruments Description		
Device name	Device image	Description /use
Desk top Computer		Through software we can: - Enhance image resolutions. - Analyzing specimen images. - Make statistical analyses. - Write & read scientific articles. - Prepare art-drawings.
Dissecting microscopes		Dissecting or stereo microscope is used - to view three-dimensional objects and larger specimens. - to study the surfaces of invertebrate specimens and their surfaces. - to carry out close work such as dissection. - Observe behaviour of different individuals of different invertebrate species. - Provided with a camera for specimens photographing.
		
Research microscopes		This kind of microscopes with or without a camera can used in a variety of scientific fields for many different purposes as: - View different types of invertebrate cells, tissues and analyzing them. - Study chemical composition in normal and abnormal tissues. - Examine different tissues for existence of parasites. - Determining the Health of an Ecosystem through identifying the number and diversity of organisms in a particular region over time.
		

Hot air Oven		- It is mainly used for the sterilization of glass wares like pipettes, bottles test tubes, Petri dishes etc. - Preparing wax embedding steps for tissue sectioning. - Drying or dehydrating invertebrate samples – Removing moisture from samples.
Incubators	 	Incubators use in invertebrate's lab are: - Provide an optimal condition of temperature, humidity, and other - Used to increase the growth rate of organisms. - Provide a controlled condition for sample storage before they can be processed in the laboratories.
Hot plate		Hot plate is a device used for: - Controlling the heating directly or to create a heat bath. - To heat samples before chemical analysis. - With magnetic stirrers, used for mixing different chemicals at certain temperatures before their applying in invertebrates' analyses.
Digital balance		A digital balance is used to weigh different chemical substances that used during different studies of invertebrates as histology, histopathology, histochemistry, behavioral studies, and ecological experiments.

Evaluate the fulfillment of lab to appropriateness of areas, building installations, facilities and human resources standards

Areas of assessment		Indicators	Yes	Somewhat	No
Floor area and capacity	1	Adequacy of the total capacity of the lab for the number of researcher (1).			✓
Windows and doors	2	Availability of windows for adequate ventilations.	✓		
	3	Ease of use of windows.	✓		
	4	There are two exits (doors) at least (2).			✓
	5	There are signs to locate directions of emergency exits		✓	
Equipment	6	Appropriate temperature during the lectures (3).	✓		
	7	Availability of good ventilation (4).	✓		
	8	The existence of adequate lighting (4).		✓	
	9	Lab is connected to the Internet	✓		
	10	The existence of directions inside the Lab showing entrances and emergency exits.		✓	
Security and Safety	11	Existence of firefighting equipment near the hall (5).	✓		
	12	Cleanliness of the room.	✓		

1. Minimum area: 1m² for each person.
2. Doors characteristics: Consists of one movable piece - opening to the inside.
3. The appropriate temperature is 18-25 °C in winter and 28°C in summer due to air-condition use.
4. Providing adequate lighting and good ventilation: windows area 10-15% of the floor area
5. Security and safety requirements: evacuation plan / evacuation responsible person/ fire distinguishers / bucket of sand / water source / good condition extinguish hoses / alarm system against fire).