

Research Lab. Sheet

Lab. Name	Physiology of Fungi
Academic Year	2021-2022

Basic Information	
Department	Botany and Microbiology
Location	4th floor-Faculty of Science-Building 1
Total area (m²)	62 m²

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

Staff Lab. members



العلوم
Faculty

حاصلة على شهادة الاعتماد من الهيئة القومية
لضمان جودة التعليم والاعتماد في 2012/7/12م



جامعة سوهاج
Sohag University

#	Name	Scientific degree	Institutional e-mail	Specializations
1	Osman El-Magraby	Prof.	osman.elmaghrebi@science.sohag.edu.eg	Microbiology
2	Sabah Saber Mohamed	Prof.	sabah.hassan@science.sohag.edu.eg	Microbiology
3	Mohamed Youssef	Prof.	youssefMS@science.sohag.edu.eg	Microbiology
4	Mohamed Bassam Aboul-Nasr	Prof.	mohamed.mohamed1@science.sohag.edu.eg	Microbiology
5	Marwa Abdelkareem	Ass. Prof.	marwa_abdelkareem@science.sohag.edu.eg	Microbiology
6	Samia Soliman	Lect.	samiasoliman@science.sohag.edu.eg	Microbiology
7	Marwa Obiedallah	Lect.	m.obiedallah@science.sohag.edu.eg	Microbiology
8	Nehad Adel Elaraby	Ass. lecturer	nehad.adel@science.sohag.edu.eg	Microbiology
9	Randa Adel	Demonstrator	randaadel@science.sohag.edu.eg	Microbiology

Theses produced by the Lab		
#	M.Sc. Thesis / Title	Approval date
1	Biosynthesis of gold nanoparticles using mine fungi and some of their applications	2021
2	Mycogenesis of silver nanoparticles using opportunistic fungi and their efficacy against human pathogenic microorganisms	2021
3	Microbiota and Mycotoxins Occurrence in Some Egyptian Fruit Juices	2010
4	Mycotoxigenic <i>Fusarium</i> Species and Natural Occurrence of Fumonisin in Corn (<i>Zea mays</i> L.) in Sohag Governorate	2011
5	Kojic Acid Production By Fungi	2007
#	Ph.D. Thesis / Title	Approval date

1	Mycobiosynthesis of silver nanoparticles and their antimicrobial effect	2019
2	Potential Macrocyclic Trichothecene Producing Fungi Isolated from Soil and Their Bioherbicidal Activities	2017
3	Biocontrol of Some Toxigenic Fungi and Their Toxins Formation	2014

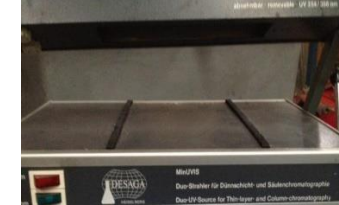
Articles produced by the Lab			
#	Title	Journal information	Year
1	<i>Aspergillus flavus</i> strain KY609551 mediated silver nanoparticle induction and their antimicrobial efficacy. (Poster)	مؤتمر شباب الباحثين 2022	2022
2	Fungus-mediated synthesis of silver nanoparticles using aspergillosis causing fungi	journal of environmental studies	2021
3	Marwa Abdel-Kareem M., Abdel-Naser A. Zohri, Shereen Abd ElMohsen E. Nasr. Novel marine yeast strains as plant growth promoting agents improve defense in wheat (<i>Triticum aestivum</i>) against <i>Fusarium oxysporum</i> .	Journal of Plant diseases and protection 128 (2).	2021
4	Abdel-Hamied M. Rasmey, Marwa Abdel-Kareem, M. Optimization of culture conditions for kojic acid production in surface fermentation by <i>Aspergillus oryzae</i> isolated from wheat grains.	Bulletin of Pharmaceutical Science, Assuit 44 (1).	2021
5	Marwa M. Abdel-Kareem, A.A. Zohri, Abdel-Hamied M. Rasmey. Biosynthesis of Silver Nanoparticles by <i>Aspergillus sakultaensis</i> and Its Antibacterial Activity against Human Pathogens.	Egyptian Journal of Microbiology 56: 11-24.	2021
6	Abdel-Naser A. Zohri1, Osama A. Al-Bedak and Marwa M. Abdel-Kareem. <i>Aspergillus sakultaensis</i> , a new species in section Flavipedes isolated from Sohag Governorate, Egypt.	Journal of Environmental Studies (JES) 20, 21-28.	2020
7	A.-H.M. Rasmey, M.A. Tawfik and Marwa Abdel-Kareem, M. Direct transesterification of fatty acids produced by <i>Fusarium solani</i> for biodiesel production: Effect of carbon and nitrogen on lipid accumulation in the fungal biomass.	Journal of Applied Microbiology 128 Issue 4, 1074-1085.	2020
8	Marwa Abdel-Kareem, M. A.-H.M., Rasmey and Zohri, A. A. The action mechanism and biocontrol potentiality of novel isolates of <i>Saccharomyces cerevisiae</i> against the aflatoxigenic <i>Aspergillus flavus</i> .	Letters in Applied Microbiology 68 Issue 2, 104-111.	2019

9	Marwa Abdel-Kareem, M. and Zohri, A. A. Extracellular mycosynthesis of gold nanoparticles using <i>Trichoderma hamatum</i> : optimization, characterization and antimicrobial activity.	Letters in Applied Microbiology 67 Issue 5, 465-475.	2018
10	Zohri, A. A. and Marwa Abdel-Kareem, M. Four strains of yeasts: as effective biocontrol agents against both growth and mycotoxins formation by selected 11 toxigenic fungi.	Global Advanced Research Journal of Microbiology 7(8): 132-135.	2018
11	Zohri, A. A.; Saber, S. M.; Youssef, M. S. and Marwa Abdel-Kareem, M. Inhibition of fungal growth and mycotoxins formation of selected toxigenic fungi by different bacterial strains.	Journal of Applied Science 1: 1-12.	2018
12	Obiedallah, M. R., Aboul-Nasr, M., & Mohamed, S. S. A study of extracellular proteins produced by <i>Aspergillus oryzae</i> .	Journal of Environmental Studies, 18(1), 25-31.	2018
13	Obiedallah, M. R., Aboul-Nasr, M. B., & Mohamed, S. S. Antibacterial effect of mycological synthesized silver nanoparticles using <i>Aspergillus oryzae</i> and <i>Fusarium solani</i> filtrates.	Journal of Environmental Studies, 18(1), 15-23.	2018
14	Marwa Abdel-Kareem, M. and Zohri, A. A. Inhibition of three toxigenic fungal strains and their toxins production using selenium nanoparticles.	Czech Mycology.69 Issue 2, 193-204.	2017
15	Zohri, A. A.; Saber, S. M.; Youssef, M. S. and Marwa Abdel-Kareem, M. Impact of some essential oils on the growth of toxigenic fungi and their toxin production.	Journal of Environmental Studies. 17:25-34.	2017
16	Alaa A. Hassan; Shaaban K. Mohamed; Nasr K Mohamed; Kamal M. A. El-Shaieb; Ahmed T. Abdel-Aziza; Marwa Rageh Abdel Rahman. Synthesis and Biological activity of 1,3-Thiazolylidenehydrazinylidene ethylpyridiniumbromide monohydrate, 1,3-Thiazolylidenehydraziniumbromide and 1,3-Thiazolylidenehydrazine derivatives	<i>Journal of Advances in Chemistry</i> , 11(3), 3357-3366.	2015
17	Zohri, A. A.; Saber, S. M.; Youssef, M. S. and Marwa Abdel-Kareem, M. Isolation and identification of toxigenic fungi from foodstuffs at Sohag Governorate, Egypt.	Journal of Environmental Studies. 13:1-12.	2014
18	Zohri, A. A.; Saber, S. M.; Youssef, M. S. and Marwa Abdel-Kareem, M. Biocontrol of some toxigenic fungal strains and their toxins production using some spices.	Journal of Environmental Studies. 13: 13 20.	2014
19	M. B. Aboul-Nasr and M. Rageh Abdul-Rahman. A simple technique for single spore isolation of <i>Fusarium verticillioides</i> and <i>Fusarium subglutinans</i>	<i>World J. Biol. Sci</i> , 2(1), pp. 021-025. 2014	2014
20	M. B. Aboul-Nasr and M. R. A. Obied-Allah. Biological and Chemical Detection	<i>Microbiology</i> , 159, 1720–1724).	2013

	of Fumonisin Produced on Agar Medium by <i>Fusarium verticillioides</i> isolates collected from Corn in Sohag, Egypt		
21	M. B. Aboul-Nasr; Sabah S. Mohamed; Marwa R. A. Obied-Allah. Incidence of mycobiota and toxigenic fusaria in corn grain samples from Sohag, Egypt	<i>Journal of Basic & Applied Mycology</i> (Egypt) 4: 69-76.	2013
24	El-Maghraby, O.M.O, Youssef, M. S. and Ibrahim, Y.M. Aflatoxins effect on fungal populations of soil, root and leaf surface of peanut plants in the field with special reference to aflatoxins biodegradation	Res. J. Environmental Toxiology, 3(1): 36- 49.	2009
22	Youssef, M. S., El-Maghraby, O.M.O and Ibrahim, Y.M. Mycobiota and mycotoxins of Egyptian peanut (<i>Arachis hypogaeae</i> L.)	Int. J. Botany, 3 (7) 325-336.	2008
23	Youssef, M. S. Studies on mycological status of sundried jew's-mallow leaves and okra fruits in Egypt	Res. J. Microbiology, 3 (5) 375-385.	2008

Lab instruments						
#	Device	quantity	Quality			
			Good	Poor	Need maintenance	malfunction
1	Desk top Computer	1	✓			
2	Fridges	3	✓			
3	Incubators	2	✓			
4	Shaker	1	✓			
5	Centrifuge	2			✓	
6	Hot air oven	1	✓			
7	Digital balance	1	✓			
8	pH meter					✓

Instruments Description	
Device image	Description /use
	Electric balance NUL-TEC: Weight of different chemicals and others
	Centrifuge Centurion: Separation of different samples into two phases.
	Labconco Lypholyzer; Preserve microorganisms for nearly 3 years.

	Electric Straub Grinding Mill : To grind grains and seeds
	UV Lamp DESAGA: Detection of different mycotoxins
	Microscope Olympus: Investigation of microorganisms
	pH meter EUTECH: Measurement and adjust of different pH of culturing media
	DELL Computer Set: For office and all computerized uses.

	Oven Heraeus: Heat sterilization purposes and samples' drying.
	Laminar flow clean bench: Culturing of different microorganisms in sterilized conditions
	Electric shaker K Model vrn: Shaking and stirring media

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.		✓	