

长江大学科研平台考核表
（实验室类）

实验室名称	长江大学根系生物学研究所				
依托学院	园艺园林学院				
实验室负责人	吴强盛	联系电话	13986717539	邮箱	wuqiangsh@163.com
一、科研项目（25 分）					
	项目类型	项目名称	立项经费 (万元)	主持人	
国家级项目	国家自然科学基金	菌根改善枳根系构型的生长素调控机制	30	刘春艳	
省部级项目	2020 年度中国-中东欧国家高校联合教育项目	球囊霉素调控生长素影响枳生长的机制解析		吴强盛	
	湖北省百校联百县—高校服务乡村振兴科技支撑行动计划	菌根菌肥在油茶上的应用研究与示范		吴强盛	
	湖北省百校联百县—高校服务乡村振兴科技支撑行动计划	柑橘菌根菌肥的田间应用及示范		吴强盛	
	湖北省百校联百县—高校服务乡村振兴科技支撑行动计划	湿地植物高效吸收小龙虾水体氮磷污染的研究与示范		杨朝东	
	湖北省百校联百县—高校服务乡村振兴科技支撑行动计划	远安县红李设施栽培示范园创建		刘春艳	
	湖北省百校联百县—高校服务乡村振兴科技支撑行动计划	茶园引入天然抗病虫害植物的研究与示范		张 霞	
	湖北省农村农业厅	特色水果生态高效栽培与采后处理	5	吴强盛	
	湖北省农村农业厅	湖北省现代农业产业技术体系——水质	7	张霞	

其他项目	浙江省柑橘研究所	鸡尾葡萄柚提质增效关键技术研究	3	邹英宁
	浙江省柑橘研究所	鸡尾葡萄柚提质增效关键技术研究	3	吴强盛
	神农架国家公园管理局	重楼和黄连适应阴生环境的结构及生理比较研究	3	张霞
	湖北省林业科学研究院	低磷胁迫对核桃根毛生长作用及生理机制	6	张德健
	湖北省林业科学研究院	丛枝菌根真菌促进核桃磷吸收机制	6.5	吴强盛

二、科研成果（45 分）

论文 (20 分)	期刊名称	论文名称	作者	论文分级
	<i>Frontiers in Plant Science</i>	Differential effects of exogenous glomalin-related soil proteins on plant growth of trifoliolate orange through regulating auxin changes	Liu RC, Gao WQ, Srivastava AK, Zou YN, Kuča K, Hashem A, Abd_Allah EF and Wu QS (吴强盛) *	2 区
	<i>Journal of Fungi</i>	The change in fatty acids and sugars reveals the association between trifoliolate orange and endophytic fungi	Meng LL, Liu RC, Yang L, Zou YN, Srivastava AK, Kuča K, Hashem A, Abd_Allah EF, Giri B, Wu QS (吴强盛) *	2 区
	<i>Scientia Horticulturae</i>	Effects of beneficial endophytic fungal inoculants on plant growth and nutrient absorption of trifoliolate orange seedling	Yang L, Zou YN, Tian ZH, Wu QS (吴强盛) *, Kuča K	2 区 (ESI 高被引论文)
	<i>Frontiers in Plant Science</i>	Metabolomics analysis reveals drought responses of trifoliolate orange by arbuscular mycorrhizal fungi with a focus on terpenoid profile	Liang SM, Zhang F, Zou YN, Kuča K, Wu QS (吴强盛) *	2 区
	<i>Frontiers in Plant Science</i>	Arbuscular mycorrhizal fungi regulate polyamine homeostasis in roots of trifoliolate orange for improved adaptation to soil moisture deficit stress	Zou Y-N, Zhang F, Srivastava AK, Wu Q-S* and Kuča K*	2 区 (ESI 高被引论文)
	<i>Plant Physiology and Biochemistry</i>	Mycorrhizal response strategies of trifoliolate orange under well-watered, salt stress, and waterlogging stress by regulating leaf aquaporin expression	Cheng XF, Wu HH, Zou YN (邹英宁) *, Wu QS*, Kuča K	2 区
	<i>BIOCELL</i>	Identification of <i>PtGai</i> (a DELLA protein) in trifoliolate orange and expression patterns in response to drought stress	Cheng XF, Hashem A, Abd_Allah EF, Wu QS (吴强盛) *, Kuča K*	4 区
	<i>Frontiers in Plant Science</i>	Arbuscular mycorrhizal fungi alleviate drought stress in trifoliolate orange by regulating H ⁺ -ATPase activity and gene expression	Cheng HQ, Zou YN, Wu QS (吴强盛) *, Kuča K*	2 区
	<i>Archives of Agronomy and Soil Science</i>	Arbuscular mycorrhizal fungi mitigate drought stress in citrus by modulating root microenvironment	Cheng HQ, Giri B, Wu QS (吴强盛) *, Zou YN, Kuča K	3 区
	<i>Horticulturae</i>	Unraveling the interaction between arbuscular mycorrhizal fungi and <i>Camellia</i> plants	Liu RC, Xiao ZY, Hashem A, Abd_Allah EF, Xu YJ, Wu QS (吴强盛) *	3 区

	<i>Horticulturae</i>	Easily extractable glomalin-related soil protein as foliar spray improves nutritional qualities of late ripening sweet oranges	Meng LL, Liang SM, Srivastava AK, Li Y, Liu CY, Zou YN, Kuća K, Hashem A, Fathi Abd_Allah E, Wu QS (吴强盛) *	3 ☒
	<i>Plant Growth Regulationi</i>	Effects of <i>Rhizophagus intraradices</i> and <i>Rhizobium trifolii</i> on growth and N assimilation of white clover	Xie MM, Chen SM, Zou YN, Srivastava AK, Rahman MM, Wu QS (吴强盛) *	3 ☒
	<i>Saudi Journal of Biological Sciences</i>	Spatial changes of arbuscular mycorrhizal fungi in peach and their correlation with soil properties	Liang SM, Zheng FL, Abd_Allah EF, Muthuramalingam P, Wu QS (吴强盛) *, Hashem A*	3 ☒
	<i>Acta Physiologiae Planturam</i>	Mycorrhiza-induced plant defence responses in trifoliate orange infected by <i>Phytophthora parasitica</i>	Tian L, Zou YN, Wu QS (吴强盛) *, Kuća K	4 ☒
	<i>Symbiosis</i>	Exploring arbuscular mycorrhizal symbiosis in wetland plants with a focus on human impacts	Huang GM, Srivastava AK, Zou YN, Wu QS* (吴强盛) , Kuća K	4 ☒
	<i>South African Journal of Botany</i>	Mycorrhizas promote P acquisition of tea plants through changes in root morphology and P transporter gene expression	Shao YD, Hu XC, Wu QS (吴强盛) *, Yang TY*, Srivastava AK, Zhang DJ, Gao XB, Kuća K	4 ☒
	<i>Agriculture</i>	Mycorrhizal fungal diversity and its relationship with soil properties in <i>Camellia oleifera</i>	Liu RC, Xiao ZY, Hashem A, Abd_Allah EF, Wu QS (吴强盛) *	2 ☒
	<i>Agronomy</i>	Exogenous glomalin-related soil proteins differentially regulate soil properties in trifoliate orange	Liu RC, Zou YN, Kuća K, Hashem A, Abd_Allah EF, Wu QS (吴强盛) *	2 ☒
	<i>Notulae Botanicae Horti Agrobotanici Cluj-Napoca</i>	Inoculation with <i>Clariodeoglopus etunicatum</i> improves leaf food quality of tea exposed to P stress	Cao JL, Shao YD, Zou YN, Wu QS (吴强盛) *, Yang TY*, Kuća K	4 ☒
	<i>Phyton-International Journal of Experimental Botany</i>	Interaction between earthworms and arbuscular mycorrhizal fungi in plants: a review	Meng LL, Srivastava AK, Kuća K, Giri B, Rahman MM, Wu QS (吴强盛) *	4 ☒
	<i>Notulae Botanicae Horti Agrobotanici Cluj-Napoca</i>	Physiological responses of mycorrhizal symbiosis to drought stress in white clover	Liang SM, Jiang DJ, Xie MM, Zou YN*, Wu QS (吴强盛) *, Kuća K	4 ☒
	<i>Plant Biology</i>	Unravelling the role of arbuscular mycorrhizal fungi in mitigating the oxidative burst of plants under drought stress	Zou YN, Wu QS (吴强盛) *, Kuća K	3 ☒
	<i>Notulae Botanicae Horti Agrobotanici Cluj-Napoca</i>	Exploring mycorrhizal fungi in walnut with a focus on physiological roles	Ma WY, Wu QS (吴强盛) *, Xu YJ, Kuća K	4 ☒
	<i>Notulae Botanicae Horti Agrobotanici Cluj-Napoca</i>	A review of the interaction of medicinal plants and arbuscular mycorrhizal fungi in the rhizosphere	Sun RT, Zhang ZZ, Zhou N, Srivastava AK, Kuća K, Abd_Allah EF, Hashem A, Wu QS (吴强盛) *	4 ☒
	<i>Symbiosis</i>	Quo vadis: signaling molecules and small secreted proteins from mycorrhizal fungi at the early stage of mycorrhiza formation	Chu Wu (吴楚) * Jinwang Qu, Liping Liu, Heng Kang, Honggang Sun, Yong Zhang, Abazar Ghorbani, Necla Pehlivan	3 ☒
	<i>Ecotoxicology and</i>	<i>Piriformospora indica</i> augments arsenic tolerance in rice (<i>Oryza</i>	Abazar Ghorbani, Mahdi Tafteh, Nasim	2 ☒

	<i>Environmental Safety</i>	<i>sativa</i>) by immobilizing arsenic in roots and improving iron translocation to shoots	Roudbari, Leila Pishkar, Wenying Zhang, Chu Wu (吴楚) *	
	<i>Journal of Plant Nutrition</i>	Iron biofortification of crop food by symbiosis with beneficial microorganisms	Chuyu Liu, Yuanming Ye, Jianglan Liu, Yao Pu, and Chu Wu (吴楚) *	4 区
	<i>Flora</i>	Structure and histochemistry of aerial adventitious roots in <i>Scurrula parasitica</i> var. <i>parasitica</i> (Loranthaceae) parasitic to host	Cunyu Zhou, Xin He, Yingchun Wang, Chunhui Zhou, Shuizhi Long, Yujiao Mei, Xia Zhang, Teng Li, Mengdi Zhang, Xiaodong Cai, Chaodong Yang (杨朝东) *	2 区
	<i>Botany Letters</i>	Anatomical and histochemical features of the arsenic hyperaccumulator <i>Pteris vittata</i> (Pteridaceae)	Linbao Li, Ten Li, Di Wu, Jinhua Wu, Mengdi Zhang, Cunyu Zhou, Xin He, Chaodong Yang, Guiyun Huang, Xia Zhang (张霞) *	4 区
	<i>Parasitology Research</i>	A new freshwater leech species affects <i>Asian swamp</i> eel stocks in China	Xu Zhiwei, Yang Chaodong (杨朝东), Gofarov M Y, Eliseeva T A, Kondakov A V, Yuan H W, Bolotov I N, Yang DQ	2 区
	<i>Botany Letters</i>	Structural and histochemical features of the slow-growing perennial <i>Coptis chinensis</i> Franch. (Ranunculaceae).	Zhou, C.Y., Zhang, X., Guo, Y.B., Hu, S.S., Tang, Y., Li, T., Wang, T., Ma, G.F., Yang, C.D (杨朝东) *.	4 区
	<i>Open Life Sciences</i>	Morphological structures and histochemistry of roots and shoots in <i>Myricaria laxiflora</i> (Tamaricaceae)	Li Linbao, Wu Di, Zhen Qiaoling, Zhang Jun, Qiu Liwen, Huang Guiyun, Yang Chaodong (杨朝东) *.	4 区
	<i>Agriculture</i>	Transcriptomic analysis of late-ripening sweet orange fruits (<i>Citrus sinensis</i>) after foliar application of glomalin-related soil proteins	Wu, H.H.; Srivastava, A.K.; Li, Y.; Zou, Y.N.; Hashem, A.; Abd_Allah, E.F.; Wu, Q.S. (吴强盛) *	2 区
	<i>Journal of Plant Interactions</i>	Genome-wide identification of citrus histone acetyltransferase and deacetylase families and their expression in response to arbuscular mycorrhizal fungi and drought	Shu B (舒波), Xie YC, Zhang F, Zhang DJ, Liu CY, Wu QS, Luo C*	3 区
	<i>Notulae Botanicae Horti Agrobotanici Cluj-Napoca</i>	Identifying strawberry Whirly family transcription factors and their expressions in response to crown rot	Hu YY, Shu B (舒波) *	4 区
	<i>Notulae Botanicae Horti Agrobotanici Cluj-Napoca</i>	Characterization of <i>Colletotrichum siamense</i> causing crown rot of strawberry in Jingzhou, Hubei Province.	Luo C, Hu YY, Shu B (舒波) *	4 区

获奖成果 (15 分)	获奖级别		获奖等级		获奖名称	获奖人及排名
	湖北省科技进步奖		三等		核桃种质资源收集评价与产业提质增效关键技术研发	吴楚/3
专利 (5 分)	授权类型		授权名称及专利号/登记号		授权人	授权时间
	发明专利		一种调节柑橘脂肪酸不饱和度的抗旱菌剂制备及应用方法/ ZL 201811391639.1		吴强盛, 何家栋, 邹英宁, 刘春艳, 张德健, 张菲	2021-04-27
	发明专利		一种促进虎杖种子快速发芽的方法. ZL 201910413078.9		吴强盛, 张德健, 邹英宁	2021-6-18
	发明专利		一种黄连施肥方法 ZL201911004693.0		杨朝东, 张霞, 魏红波, 杨小林, 周存宇	2021-10-22
	实用新型		红茶发酵黄茶闷黄一体机 z1202021818600.6		叶阳, 苏渊卉, 吕立堂, 黄友谊, 张霞, 苏中强, 方寅	2021-1-15
其他成果 (5 分)	新品种	级别	新农药	级别	新兽药	级别
三、人才队伍建设与培养 (20 分)						
获批高层次人才	人才级别		人才类型		姓名	下文时间
	国家级		2020 中国高被引学者		吴强盛	2021-4-22
	省部级					
	其他		长江大学菁英人才		张德健	2021-01-05
人才引进	人才级别		人才类型		姓名	引进时间
	国家级					
	省部级					
	其他					
职称晋升	姓名		晋升级别		晋升时间	
	张德健		副教授		2021-1-5	

博士培养	姓名	专业	毕业时间	
	谢苗苗	园艺植物资源与利用	2021-06	
四、运行管理（10分）				
召开学术委员会	召开时间	召开地点	学术委员会到会人数	是否形成会议纪要
	2021-5-8	农科大楼 3002	4	是
	2021-12-3	农科大楼 3002	4	是
设置开放课题	数量		金额	
其他需要说明的问题	因为学校没有提供运行经费，因此没有进行开放课题的设置。			
五、考核意见				
平台负责人意见	<p>实验运行良好，取得丰硕的成果，完成了年度目标任务。</p> <p>负责人签字：吴强盛 日期：2021.12.29</p>			
依托学院意见	<p>情况属实！</p> <p>学院盖章：[红章] 日期：2021.12.29</p>			
考核等级	<p> <input type="checkbox"/> 优秀 <input type="checkbox"/> 良好 <input type="checkbox"/> 合格 <input type="checkbox"/> 限期整改 </p> <p>学校盖章： 日期：</p>			

注：本表为重点实验室类使用，填写数量不够时，可添加行，本表双面打印。