


Brief CV

Name	Xirui Zhang	Gender	Male	
Title (Pro./Dr.)	Dr.	Country	China	
Phone Number		University Email		
University/Department	Mechanical and Electrical Engineering College, Hainan University			
Personal Web Sites	http://www.hainu.edu.cn/stm/jidian/2015430/10415999.shtml			
Research Area	Tropical agricultural machine			
<p>During the past several years, my research experience main concentrated on the development of tropical agricultural machine, especially the comprehensive utilization of banana stalk, which contains the extraction of banana stalk fiber, the crushing and returning of banana stalk and the biomass briquette technologies of banana stalk. Research on nearly 5 years of scientific research project, I have made some achievements in scientific research, such as published 16 papers (5 papers indexed by EI Journal), authorized 10 invention patents and 8 utility model patents.</p>				
<p>Academic Research Experience</p> <p>Jan.,2016-Dec.,2019 National Natural Science Foundation of China (No. 51565010)</p> <p>Jan.,2016-Dec.,2017 Natural Science Foundation of Hainan Province (No. 20163038)</p> <p>Jan.,2016-Dec.,2017 College Science Fund of Hainan Province (HNKY2014-15)</p> <p>Jan.,2012-Dec.,2014 National Natural Science Foundation of China Youth Fund Project (No. 51105123)</p> <p>Jan.,2012-Dec.,2013 Sub Project of Special Fund for Agro-scientific Research in the Public Interest (No.201203072-01-02), Hainan University</p> <p>Jan.,2012-Dec.,2016 Key Scientific and Technological project of Hainan Province (No. ZDXM20120074),Hainan University</p> <p>Jan.,2014-Dec.,2016 The Scientific Research Project of Universities in Hainan Province of Hainan Education Department (No.HNKY2014-15),Hainan University</p>				

Publications

1. **Zhang Xirui**, Gan Shengbao, Zheng Kan, et al. Design and experiment on cut roll feeding type horizontal shaft flail machine for banana pseudostem crushing and returning[J]. Transactions of the Chinese Society of Agricultural Engineering (Transactions of the CSAE), 2015, 31(4): 33—41. (EI)
2. **Zhang Xirui**, Wang Junlin, Li Yue, et al. Design and experiment on biomass pellet densifying machine for banana stem[J]. Transactions of the Chinese Society of Agricultural Engineering (Transactions of the CSAE), 2012, 28(11): 22—26. (EI)
3. **Zhang Xirui**, Gan Shengbao, Li Yue, et al. Development and experiment on solid forming machine with planetary wheel style internal and external taper roller flat die[J]. Transactions of the Chinese Society of Agricultural Engineering.(Transactions of the CSAE), 2014, 30(22): 10—20.(EI)
4. **Zhang Xirui**, Zheng Kan, Liang Dong, et al. Design and experiment on rolling and crushing combined extracting machine for banana stem fiber[J]. Transactions of the Chinese Society of Agricultural Engineering (Transactions of the CSAE),2013, 29(20): 24—31.(EI)
5. Gan Shengbao, Li Yue, **Zhang Xirui**, et al. Design and experiment on banana stalk chopper with feeding type spindle flail[J]. Transactions of the Chinese Society of Agricultural Engineering (Transactions of the CSAE), 2014, 30(13): 10—19. (EI)
6. **Xirui Zhang**, Hongwen Li, Jin He, Qingjie Wang, and Mohammad H Golabi. Influence of conservation tillage practices on soil properties and crop yields for maize and wheat cultivation in Beijing, China. Australian Journal of Soil Research, 2009, 47, 362–371. (SCI)
7. **Zhang Xirui**, He Jin, Li Hongwen, Li Wenying, Li Hui. Design and experiment on the driving disc of anti-blocking unit for no-tillage planter. Transactions of the CSAE, 2009,25(9): 117—121. (EI)
8. **Zhang Xirui**, He Jin, Li Hongwen, Li Wenying, Design of the Powered-chain Anti-blocking Mechanism for Wheat No-till Planter. Transactions of the Chinese Society for Agricultural Machinery. 2009,40(10): 47—51. (EI)

9. **Zhang Xirui**, Li Hongwen, He Jin, Wang Qingjie, Zhang Xuemin.. Comparative Experimental Study on Three Kinds of Anti-blocking Mechanism for Wheat No-till Planting Transactions of the Chinese Society for Agricultural Machinery. 2010, 44(2). (EI)
10. **Zhang Xirui**, Li Hongwen, He Jin, Wang Qinjie, Wu Shasha. Study on Horizontal Residue-throwing Finger-wheel Type No-till Planter for Maize. Transactions of the CSAE. (Submitted, EI)
11. **Zhang Xirui**, Li Hongwen, Yi Kunxiu, He Jin. Experiment and Design on Disk Cutter with Power Type of Wheat No-till Planter. Journal of Agricultural Mechanization Research. 2009 31(7) : 53—55,58.
12. **Zhang Xirui**, Dong Youfu, Zhang Daolin, Li Jiandong. Research on Gripping Delivery Mechanism of Corn Harvester. Agricultural Equipment and Vehicle Engineering. 2007,195(10) : 9—10,17.

Patents

- 1.**Zhang Xirui** et al.The rolling cut type combination of banana stalk crushing and returning machine.China National Invention Patent.CN 201310164538.1.issued January 2015.
- 2.**Zhang Xirui** et al.The self-propelled banana straw harvester.China National Invention Patent.CN 201210558247.6.issued August 2014.
- 3.**Zhang Xirui** et al.The active-feeding banana stalk crushing machine.China National Invention Patent.CN 201010588698.5.issued May 2012.
- 4.**Zhang Xirui** et al.The drum-combination banana stalk fiber extraction machine.China National Invention Patent.CN 201210341351X.issued July 2014.
- 5.**Zhang Xirui** et al. The field-processing banana stalk fiber extraction machine.China National Invention Patent.CN 201210533537.5.issued October 2014.
- 6.**Zhang Xirui** et al.The multi-step banana stalk crushing machine.National New and Practical Model Patent.CN 201120311972.4.issued April 2012.
- 7.**Zhang Xirui** et al. The convey type banana stalk crushing machine. National New and Practical Model Patent.CN 201320642318.0.issued April 2014.
- 8.**Zhang Xirui** et al. The vibration subsoiler. China National Invention Patent. CN

201420826713.9.Under a legal checkup. 2014.

9.**Zhang Xirui** et al. The banana stalk solid densification machine of variable-helix type.China National Invention Patent. CN 201410726837.4.Under a legal checkup. 2014.

10.**Zhang Xirui** et al.The solid raw material convey machine of banana stalk of water-squeezing and crushing type.China National Invention Patent. CN 201410733816.5.Under a legal checkup. 2014.

11.**Zhang Xirui** et al. The banana stalk chopping device of helical-blade type.China National Invention Patent. CN 201420823523.1.Under a legal checkup. 2014.

12.**Zhang Xirui** et al.The inner-ring-mold biomass forming integrated machine.China National Invention Patent. CN 201410766811.2.Under a legal checkup. 2014.