

國立東華大學教師個人基本資料表

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最高學歷/起迄：美國加州大學柏克萊分校博士 1988-1993

現職/起迄：自然資源與環境學系教授/2014.8~

到任年月份(東華)：2011.8

專長： 1. 森林動態 2. 植物生態
3. 人工林經營管理 4.

孫義方

I Fang Sun

資料更新日期：2017/02/10



■研究 (2011.8 ~ 2017.2)

一、期刊論文：

A、具匿名審查制度之期刊

2011

1. Lin, Y-C, Chang, L-W, Yang, K-C, Wang, H-H, Sun, I-F., 2011. Point patterns of tree distribution determined by habitat heterogeneity and dispersal limitation. *Oecologia* 165:175-184. (SCI) (IF=3.093, R/C=40/144, Ecology)
2. McEwan, R. M., Lin, Y-C., Sun, I-F., Hsieh, C-F., Su, S-H., Chang, L-W., Song, G-Z., Wang, H-H., Hwong, J-L., Lin, K-C., Yang, K-C., Chiang, J-M. 2011. Topographic and biotic regulation of aboveground carbon storage in subtropical broad-leaved forests of Taiwan. *Forest Ecology and Management*. 262:1817-1825. (SCI) (IF=2.660, R/C=4/65, Forestry)
3. Hosaka, T., Yumoto, T., Chen, Y-Y, Sun, I-F., Wright, J. Noor N.S.M.D. 2011. Abundance of insect seed predators and intensity of seed predation on Shorea (Dipterocarpaceae) in two consecutive masting events in Peninsular Malaysia. *Journal of Tropical Ecology* 27:651-655. (SCI) (IF=0.887, R/C=114/144, Ecology)
4. Lin, Y-C., Lin, P.J., Wang, H.H. and Sun, I-F. 2011. Seed distribution of eleven tree species in a tropical forest in Taiwan. *Botanical Studies* 52: 327-336. (SCI) (IF=0.809, R/C=145/204, Plant Science)

2012

5. De Cáceres, M., Legendre, P., Valencia, R., Cao, M., Chang, L-W., Chuyong, G., Condit, R., Hao, Z., Hsieh, C-F., Hubbell, S., Kenfack, D., Ma, K., Mi, X., Supardi N., Kassim, A. R., Ren, H., Su, S-H., Sun, I-F., Thomas, D., Ye W., and He, F. 2012. The variation of tree beta diversity across a global network of forest plots. *Global Ecology and Biogeography* 21(12): 1191-1201. (SCI) (IF=6.510, R/C=10/144, Ecology)
6. Laurance, W.F., [...], Sun, I-F., [...], and Zamzani F. (216 authors total). 2012. Averting

biodiversity collapse in tropical forest protected areas. *Nature* 489: 290-294. (SCI) (IF: 38.597, 1/56)

2013

7. Chang-Yang, C-H., Lu, C-L., Sun, I-F. and Hsieh, C-F. 2013. Flowering and fruiting patterns in a subtropical rain forest, Taiwan. *Biotropica* 45(2): 165–174. (SCI) (IF=2.084, R/C=65/144, Ecology)
8. Lasky, J. R., Sun*, I-F., Su, S-H., Chen, Z-S. and Keitt, T. H. 2013. Trait-mediated effects of environmental filtering on tree community dynamics. *Journal of Ecology* 101(2): 722-733. (SCI) (IF=5.521, R/C=12/144, Ecology) *Corresponding author
9. Chang-Yang, C.-H., Lu, C.-L., Sun, I-F., and Hsieh, C.-F. 2013. Long-term seedling dynamics of tree species in a subtropical rain forest, Taiwan. *Taiwania* 58: 35-43.
10. Shen, G., He, F., Waagepetersen, R., Sun, I-F., Hao, Z., Chen, Z-S. and Yu, M. 2013. Quantifying effects of habitat heterogeneity and other clustering processes on spatial distributions of tree species. *Ecology* 94(11): 2436-2443. (SCI) (IF=5.000, R/C=17/144, Ecology)
11. Lai, J., Coomes, D.A, Du, X., Hsieh, C-F., Sun, I-F., Chao, W-C., Mi, X., Ren, H., Wang, X., Hao Z., and Ma, K. 2013. A general combined model to describe tree-diameter distributions within subtropical and temperate forest communities. *Oikos* 122(11): 1636-1642. (SCI) (IF=3.444, R/C=35/144, Ecology)
12. Ryan A. Chisholm, R.A., Muller-Landau, H.C., Rahman, A., Bebbler. D.P., Bin, Y, Bohlman, S.A., Bourg, N.A. Brinks, J., Bunyavejchewin, S., Butt, N., Cao, H., Cao, M., Cárdenas, D., Chang, L-W, Chiang, J-M, Chuyong, G., Condit, R., Dattaraja, H.S., Davies, S., Duque, A., Fletcher, C., Gunatilleke, C. V. S., Gunatilleke, I.A.U.N., Hao, Z., Harrison, R.D., Howe, R., Hsieh, C-F., Hubbell, S.P., Itoh, A., , Kenfack, D., Kiratiprayoon, S., Larson, A.J., Lian, J., Lin, D., Liu, H., Lutz, J., Ma, K., Malhi, Y., McMahan, S., McShea, W., Meegaskumbura, M., Razman, S., Morecroft, M.D., Nytch, C.J. Oliveira, A., Parker, G.G., Pulla, S., Punchi-Manage, R., Romero-Saltos, H., Sang, W., Schurman, J., Su, S-H., Sukumar, R., Sun, I-F., Suresh, H.S., Tan, S., Thomas, D., Thomas, S., Thompson, J., Valencia, R., Wolf, A., Yap, S., Ye, W., Yuan, Z., Zimmerman, J.K. 2013. Scale-dependent relationships between tree species richness and ecosystem function in forests. *Journal of Ecology* 101(5): 1214-1224. (SCI) (IF=5.521, R/C=12/144, Ecology)
13. Brown, C., D. F. R. P. Burslem, J. B. Illian, L. Bao, W. Brockelman, M. Cao, L. W. Chang, H. S Dattaraja, S. Davies, C. V. S. Gunatilleke, I. A. U. N. Gunatilleke, J. Huang, A. R. Kassim, J. V. LaFrankie, J. Lian, L. Lin, K. Ma, X. Mi, A. Nathalang, S. Noor, P. Ong, R. Sukumar, S. H. Su, I. F. Sun, H. S. Suresh, S. Tan, J. Thompson, M. Uriarte, R. Valencia, S. L. Yap, W. Ye and R. Law. 2013. Multispecies coexistence of trees in tropical forests: spatial signals of topographic niche differentiation increase with environmental heterogeneity. *Proceedings of the Royal Society B* 280:20130502. (SCI) (IF: 5.05, R/C=8/85, Biology)

2014

14. Stephenson, N. L., Das, A. J., Condit, R., Russo, S. E., Baker, P. J., Beckman, N. G., Coomes, D. A., Lines, E. R., Morris, W. K., Ru'ger, N., A'lvarez, E., Blundo, C., Bunyavejchewin, S., Chuyong, G., Davies, S. J., Duque, A., Ewango, C. N., Flores, O., Franklin, J. F., Grau, H. R., Hao, Z., Harmon, M. E., Hubbell, S. P., Kenfack,

- D., Lin, Y., Makana, J.-R., Malizia, A., Malizia, L. R., Pabst, R. J., Pongpattananurak, N., Su, S.-H., Sun, I-F., Tan, S., Thomas, D., van Mantgem, P. J., Wang, X., Wisser, S. K. and Zavala, M. A. 2014. Rate of tree carbon accumulation increases continuously with tree size. *Nature* 507: 90-93. (SCI) (IF: 38.597, 1/56)
15. Iida, Y., Kohyama, T. S., Swenson, N. G., Su, S-H., Chen, C-T., Chiang J-M., and Sun*, I-F. 2014. Linking functional traits and demographic rates in a subtropical tree community: the importance of size-dependency. *Journal of Ecology* 102: 641-650. (SCI) (IF=5.521, R/C=12/144, Ecology) *Corresponding author
16. Chisholm, R.A., Condit, R., Abd. Rahman, K., Baker, P.J., Bunyavejchewin, S., Chen, Y-Y., Chuyong, G., Dattaraja, H.S., Davies, S., Ewango, C.E.N., C.V.S. Gunatilleke, I.A.U. Gunatilleke, Hubbell, S., Kenfack, D., Kiratiprayoon, S., Lin, Y-C., Makana, J-R., Pongpattananurak, N., Pulla, S., Punchi-Manage, R., Sukumar, R., Su, S-H., Sun, I-F., Suresh, H.S., Tan, S., Thomas, D. and Yap, S. 2014. Temporal variability of forest communities: empirical estimates of population change in 4000 tree species. *Ecology letters* 17(7): 856-866. (SCI) (IF=10.689, R/C=2/144, Ecology)
17. Erickson, D. L., Jones, F. A., Swenson, N. G., Pei, N., Bourg, N. A., Chen, W., Davis, S. J., Ge, X-J., Hao, Z., Howe, R. W., Huang, C-L., Larson, A. J., Lum, S. K. Y., Lutz, J. A. Ma, K., Meegaskumbura, M., Mi, X., Parker, J. D., Sun, I-F., Wright, S. J., Wolf, A. T., Ye, W., Xing, D., Zimmerman J. K., and Kress, W. J. 2014. Comparative evolutionary diversity and phylogenetic structure across multiple forest dynamics plots: a mega-phylogeny approach. *Frontiers in Genetics* 5:1-14. (SCI)
- 2015**
18. Anderson-Teixeira, K. J., [...], Sun, I-F., [...], and Zimmerman J. (108 Authors Total) 2015. CTFSS-ForestGEO: a worldwide network monitoring forests in an era of global change. *Global Change Biology* 21: 528-549. (SCI) (IF=8.044, R/C=5/144, Ecology)
19. Gang F., Mi, X., Eiserhardt, W. L., Jin, G., Sang, W., Lu, Z., Wang, X. Li, X., Li, B., Sun, I-F., Ma. K. and Svenning, J-C. 2015. Assembly of forest communities across East Asia – insights from phylogenetic community structure and species pool scaling. *Scientific reports* 5:9337. (SCI) (IF=5.578)
20. Slik, J.W.F., Arroyo-Rodríguez, V., Aiba, S-I., Alvarez-Loayza, P., Alves, L.F., [...], Sun, I-F., Venticinque, E. M. (175 authors total). 2015. An estimate of the number of tropical tree species. *P.N.A.S.* 112:7472-7477. (SCI) (IF=9.674)
21. Wright, S. J., Sun, I-F. Pickering, M., Fletcher, C. D. and Chen, Y-Y. 2015. Long-term changes in liana loads and tree dynamics in a Malaysian forest. *Ecology* 96: 2748-2757. (SCI) (IF=5.000, R/C=17/144, Ecology)
22. Kraft, T. S. Wright, S. J., Turner, I., Lucas, P. W., Oufiero, C. E., Nur Supardi Noor, M., Sun, I-F. and Dominy, N. J. 2015. Seed size and the evolution of leaf defences. *Journal of Ecology* 103: 1057-1068. (SCI) (IF=5.521, R/C=12/144, Ecology)
23. Pei, N., Erickson, D. L., Chen, B., Ge, X., Mi, X., Swenson, N. G., Zhang, J-L., Jones, A. F., Huang, C-L., Ye, W., Lum, S., Bourg, N. A., Parker, J. D., Zimmerman, J.K.,

McShea, W. J., Lopez, I. C., Sun, I-F., Davies, S. J., Ma, K., and Kress, W. J. 2015. Closely-related taxa influence woody species discrimination via DNA barcoding: evidence from global forest dynamics plots. *Scientific Reports* 5:15127. (SCI) (IF=5.578)

2016

24. Kunstler, G., Falster, D., Coomes, D. A., Hui, F., Kooyman, R. M., Laughlin, D. C., Poorter, L., Vanderwel, M., Vieilledent, G., Wright, S. J., Aiba, M., Baraloto, C., John Caspersen, J., Cornelissen, J. H. C., Gourlet-Fleury S., Hanewinkel, M., Herault, B., Kattge, J., Kurokawa, H., Onoda, Y., Peñuelas, J., Poorter, H., Uriarte, M., Richardson, S., Ruiz-Benito, P., Sun, I-F., Ståhl, G., Swenson, N. G., Thompson, J., Westerlund, B., Wirth, C., A. Zavala, M. A., Zeng, H., Zimmerman, J. K., Zimmermann, N. E., & Westoby, M. 2016. Plant functional traits have globally consistent effects on competition. *Nature* 529: 204-207.
25. Chang-Yang, C-H., Sun, I-F*, Tsai, C-H., Lu, C-L., and Hsieh, C-F. 2016. ENSO and frost co-determine decade-long temporal variation in flower and seed production in a subtropical rainforest. *Journal of Ecology* 104: 44-54. (SCI) (IF=5.521, R/C=12/144, Ecology) *Corresponding author
26. Wang, X., Wiegand, T., Kraft, N. J. B., Swenson, N. G., Davies, S. J., Hao, Z., Howe, T., Lin, Y.-C., Ma, K., Mi, X., Su, S.-H., Sun, I-F., Wolf, A. 2016. Stochastic dilution effects weaken deterministic effects of niche-based processes on the spatial distribution of large trees in species rich forests. *Ecology* 97: 347-360. (SCI) (IF=5.000, R/C=17/144, Ecology)
27. Hosaka, T., Yumoto, T., Chen, Y-Y., Sun, I-F., Wright, S. J., Numata, S. & Nur Supardi, N. M. 2016. Responses of pre-dispersal seed predators to sequential flowering of Dipterocarps in Malaysia. *Biotropica*
28. Chiang, J-M., Spasojevic, M. J., Muller-Landau, H. C., Sun, I-F., Lin, Y. C., Su, S-H., Chen, Z-S., Chen, C-T., Swenson, N. G. & McEwan, R. W. 2016. Functional composition drives ecosystem function through multiple mechanisms in a broadleaved subtropical forest. *Oecologia* 182 (3): 829-840.

二、研討會論文(2011~2017.2)：

2011

1. I-Fang Sun. Long-term tree replacement rates resolve Janzen-Connell paradox in a Neotropical forest. International symposium for biodiversity and theoretical ecology. May 8-11, 2011. Guangzhou, China.
2. I-Fang Sun. Long-term tree replacement rates resolve Janzen-Connell paradox in a Neotropical forest. Symposium on Climate Change and Forest Biodiversity Conservation. July 27-28, 2011. Beijing, China.
3. I-Fang Sun. How do demographic dynamics of seedlings and juveniles transcend into and affect the diversity of mature trees? Workshop on life history regulation of forest trees. September 2-3, 2011. Hokkaido University. Sapporo, Japan.
4. 孫義方。台灣森林動態樣區之發展現況及未來方向。2011 年海峽兩岸森林動態研討會。2011 年 10 月 14-15 日。東海大學，台中，台灣。
5. 孫義方。基於網路的森林生物多樣性維持機制緯向梯度研究。2011 年兩岸生物多樣性學術研討會。2011 年 11 月 14-15 日。特有生物中心，集集，台灣。

2012

6. I-Fang Sun. Introduction of TERN and Forest Dynamics Plots (FDP) in Taiwan. Third Japan-Taiwan Ecological workshop. November 27-28, 2012. Hokkaido University. Sapporo, Japan.
7. I-Fang Sun, Jesse R. Lasky, Sheng-Hsin Su, Zueng-Sang Chen, and Timothy H. Keitt. Trait-by-environment interaction effects on tree community dynamics. 第六屆海峽兩岸森林動態樣區研討會。2012年11月5-6日。廣西，桂林。
8. 孫義方。森林生物多樣性監測：全球森林動態樣區研究網之現狀與進展。第十二屆浙江省植物學會。2012年12月8日。溫州、浙江。

2013

9. 孫義方。見樹又見林：森林生態學之未來展望。2013。動物行為暨生態學研討會。2013年1月26日。東華大學，花蓮、台灣。
10. I-Fang Sun, Yu-Yun Chen and Steve Hubbell. Long-term tree replacement rates resolve Janzen-Connell paradox in a Neotropical forest. NCEAS working group. February 16, 2013. Santa Barbara, California, USA.
11. I-Fang Sun and Yu-Yun Chen. Global warming and elevational range shift in a subtropical forest. NCEAS working group. September 6-8, 2013. Santa Barbara, California, USA.
12. I-Fang Sun. Opportunities in large plot monitoring in forest ecology. October 10-12. ILTER meeting, Seoul. Korea.

2014

13. I-Fang Sun. Global warming and elevational range shift in a subtropical forest. International winter school. January 8-10, 2014. Hokkaido University, Sapporo, Japan.
14. I-Fang Sun and Yu-Yun Chen. Global warming and elevational range shift in a subtropical forest. 第八屆海峽兩岸森林動態樣區研討會。2014年8月17-21日。瀋陽。
15. I Fang Sun. Taiwan forest dynamics plots network and plant functional trait initiatives. November 17-21, 2014. The third Taiwan-Japan Ecology Workshop. Hualien, Taiwan.

2015

16. I Fang Sun, Yu Yun Chen, Chun Huo Chiu and Anne Chao. Examining ecological processes operate on different life stages using beta diversity concept. NCEAS working group. March 21-23, 2015. Leipzig, Germany.
17. I-Fang Sun and Yu-Yun Chen. Global warming and elevational range shift in a subtropical forest. 台灣長期生態研究網年會。2015年3月14-15日。林試所蓮華池研究中心，魚池、台灣。

2016

18. I Fang Sun and Chang Yang Chia Hou. Effects of ENSO and spring frost on flower and seed production in a subtropical rain forest. June 22-26, 2016. Association of Tropical Biology and Conservation (ATBC) Annual meeting, Montpellier, France.
19. I Fang Sun and E Ping Rou. Disentangling sources of intraspecific functional trait variations in a subtropical rain forest. June 22-26, 2016. Association of Tropical Biology and Conservation (ATBC) Annual meeting, Montpellier, France.
20. I Fang Sun and Jesse Lasky. Trait-by-environment interaction effects on tree community dynamics. sNiche work shop. June 05-07, 2016. Leipzig, Germany
21. I Fang Sun and Chang Yang Chia Hou. Effects of ENSO and spring frost on flower and seed production in a subtropical rain forest. December 15-16, 2016. QCBS, McGill University,

Montreal, Canada.

三、五年內之研究計畫 (2011.2 ~ 2017.2):

| 起迄年月 | 研究計畫名稱 | 主持人/共同主持人 | 計畫經費 | 補助單位 |
|-----------------|---|-----------|--------------|-----------|
| 2008/08-2011/07 | 種子傳播及密度制約效應對台灣常綠闊葉林森林樹種多樣性影響之研究 | 主持人 | 3,608,000 元 | 國科會 |
| 2009/08-2010/07 | 人工林不同疏伐強度對原生樹種更新與森林復育之研究(II) | 主持人 | 680,000 元 | 國科會 |
| 2010/08-2013/07 | 基於網路的森林生物多樣性維持機制緯向梯度研究 | 主持人 | 4,985,184 元 | 國科會 |
| 2010/01-2013/01 | 臺灣本島長期森林動態樣區種子雨及喬木小苗監測計畫 | 主持人 | 8,700,000 元 | 農委會林務局 |
| 2011/09-2012/12 | 人倫柳杉人工林動態樣區複查計畫 | 主持人 | 2,700,000 元 | 農委會林務局 |
| 2013/06-2014/12 | 福山森林動態樣區複查計畫 | 主持人 | 9,250,000 元 | 農委會林務局 |
| 2014/08-2018/07 | 量化及分析生物多樣性的數學與統計之整合架構:物種多樣性、系統演化多樣性、功能多樣性與相似/分化量度及其在臺灣森林動態之應用 | 共同主持人 | 14,796,000 元 | 科技部卓越領航計畫 |
| 2015/08-2018/07 | 全球暖化對台灣森林生態系影響之初探 | 主持人 | 3,300,000 元 | 科技部 |
| 2015/09-2016/08 | 臺灣本島長期森林動態樣區種子雨及喬木小苗監測計畫(1/3) | 主持人 | 2,220,000 元 | 農委會林務局 |
| 2015/12-2017/06 | 人倫柳杉人工林動態樣區第二次複查計畫 | 主持人 | 3,600,000 元 | 農委會林務局 |



■ 教學 (2011.8 ~ 2017.2)

四、三年內開授課程：

| 學年度 | 課程名稱(必/選) | 學分數 | 選修人數 |
|-------|-------------------------------|-----|------|
| 105 上 | 休假 | | |
| 105 下 | 熱帶生態學 (選) | 4 | 20 |
| 105 下 | 動植物交互關係 (選) | 3 | 30 |
| 104 上 | 病假 | | |
| 104 下 | 熱帶生態學 (選) | 4 | 20 |
| 103 上 | 生態學 (必) | 3 | 62 |
| 103 上 | Special topic on Ecology (合開) | 3 | 6 |
| 103 上 | 植物生態學 (選) | 3 | 8 |
| 103 下 | 熱帶生態學 (選) | 4 | 20 |
| 103 下 | 動植物交互關係 (選) | 3 | 28 |

| | | | |
|-------|-------------------------------|---|----|
| 102 上 | 生態學 (必) | 3 | 65 |
| 102 上 | Special topic on Ecology (合開) | 3 | 3 |
| 102 下 | 熱帶生態學 (選) | 4 | 15 |
| 102 下 | 動植物交互關係 (選) | 3 | 26 |
| 102 下 | 生態田野調查 (合開) | 3 | 25 |
| 101 上 | 生態學 (必) | 3 | 51 |
| 101 上 | Special topic on Ecology (合開) | 3 | 6 |
| 101 上 | 自然科學方法與論文寫作 (選) | 3 | 9 |
| 101 下 | 熱帶生態學 (選) | 4 | 12 |
| 101 下 | 動植物交互關係 (選) | 3 | 21 |

五、三年內指導研究生狀況：

| 學年度 | 碩士班(人) | 博士班(人) | 畢業人數 | |
|-----|-----------|-----------|------|----|
| | | | 碩士 | 博士 |
| 105 | 1 (國際生 1) | 2 (國際生 1) | | |
| 104 | 6 (國際生 3) | 1 | 2 | |
| 103 | 5 (國際生 2) | | 1 | |
| 102 | 5 (國際生 3) | | | |
| 101 | 2 (國際生 2) | | | |



■ 服務 (2011.8 ~ 2017.2)

六、校內校、院、系(所、科及中心)各級公共事務參與：

| 年月 | 校/院/系級 | 項目 |
|-----------|--------|-----------|
| 2012-2016 | 校 | 國際事務委員會 |
| 2012-2013 | 校 | 宿舍調配管理委員會 |
| 2012-2015 | 院 | 課程規劃委員會 |
| 2012-2016 | 院 | 國際學生組組長 |
| 2011-2016 | 系 | 國際學生導師 |

七、專業學術服務工作項目：

| 年月 | 校內/校外 | 項目 |
|----------------|-------|-------------------|
| 2011/8-2014/2 | 校外 | 台灣生態研究網(TERN) 召集人 |
| 2010/8~present | 校外 | 亞熱帶生態學會 理事 |



■ 教學與研究獎勵 (2011.8 ~ 2017.2)

八、教學與研究獎勵事蹟：

| 學年度 | 校內/校外 | 項目 |
|-----|-------|------------|
| 105 | 校內 | 學術研究績效獎勵 |
| 105 | 校內 | 馬來西亞移地教學補助 |
| 104 | 校內 | 學術研究績效獎勵 |
| 104 | 校內 | 馬來西亞移地教學補助 |
| 103 | 校內 | 環境學院優良教師 |
| 103 | 校內 | 學術研究績效獎勵 |
| 103 | 校內 | 馬來西亞移地教學補助 |
| 102 | 校內 | 學術研究績效獎勵 |
| 102 | 校內 | 馬來西亞移地教學補助 |
| 101 | 校內 | 學術研究績效獎勵 |
| 101 | 校內 | 馬來西亞移地教學補助 |
| 100 | 校內 | 馬來西亞移地教學補助 |

以上資料屬實。填表人簽名：_____ (電子檔免填) 填表日期：_____

_____。