CURRICULUM VITAE **16 December 2016**

Yahya Kooch, Ph.D.

Forest Ecology, Soil Ecology

Personal details
Date of birth: 21st September 1982
Citizenship: Iranian
Tel: +98-122-6253101 (-3)
Fax: +98-122-6253499
Mobile: +98-9112932313
Email: yahya.kooch@yahoo.com & yahya.kooch@modares.ac.ir
Web page: http://www.modares.ac.ir/index.jsp?siteid=56&fkeyid=&siteid=32&pageid=13191&tchcode=391388
Google Scholar: http://scholar.google.com/citations?user=UB-kHBcAAAAJ&hl=en

Education and Career

Since November5/2012 – to date
Faculty Member (Lecturer), Assistant Professor of Forestry, Faculty of Natural Resources, Tarbiat Modares University (TMU), IRAN.

September22/2008 – Jun19/2012
Doctoral studies at the Faculty of Natural Resources, Tarbiat Modares University (Iran) (Title of PhD thesis: Soil variability related to pit and mound, canopy cover and individual tree in a Hyrcanian Oriental Beech stand, northern Iran).

September28/2011- March7/2012
Research Project at the Gottingen University, Germany (Title of Project: Fluxes of CO_2, N_2O and CH_4 following windthrow events at Solling forest, central Germany; Supervisor: Prof. Dr. Norbert Lamersdorf).

September23/2005 – September20/2008
M.Sc studies at the Faculty of Natural Resources, University of Mazandaran (Iran) (Title of M.Sc thesis: Determination and differentiation of plant ecological units and relation to some soil properties in Khanikan lowland forest of Chalous, Iran).

September23/2000 – September20/2004
B.Sc studies at the Faculty of Natural Resources, Gorgan University of Agriculture Sciences and Natural Resources (Iran).

Scientific activity

His scientific activity concerns research topics in the field of forest ecology, forest soils and forest nutrition as well as forest biogeochemistry cycle. Main research interests: i) pedodiversity in windthrow forest ecosystems, ii) Linking soil microbial and faunal communities and nutrient cycling processes, iii) Influence of site and species on N availability, iv) evolution of organic matter in soils and sediments in relation to climate changes (sinks or sources of C?), v) Diversity of humus forms in forest ecosystems.

Graduate students

1- *Samaneh Haji Mirza Aghayee*, M Sc- Analysis of plant ecological groups associated with soil factors in Sardabrood forests of Chalous, Iran. (Completed)
2- *Leila Aghajani*, M Sc- Studying of edaphical parameters in native and non-native plantations, Chi-Bagh distric, Iran. (Completed)
3-*Kolsom Foladi*, M Sc- Assessment the effects of dead tress on soil physico-chemical properties, Kachid district, Iran. (Completed)
4-*Javad Jafari*, M Sc- Relationship between ecosystem units and soil characters in Darkash forests, Iran. (Completed)
5-*Maryam Bazyari*, M Sc- The ecological effects of forest roads on plant biodiversity and soil feature in forestry planning of Mazandaran, Iran. (Completed)
6-*Abdollah Motahari-Fard*, M Sc- The effect of different land use on soil particulate organic matter, Iran. (Completed)
7-*Mahsa Dadashi*, M Sc- The environmental effects of afforested types on soil carbon sequestration, Iran. (Completed)
8-*Ahmad Eshaghi*, M Sc- Analysis of ecosystem units in Oak site, Iran. (Completed)
9-*Fatemeh Gheibi*, M Sc- Effect of pure and mixed reforested stands of redwood-maple and alder on plant biodiversity and soil fertility indices, Iran. (Completed)
10-*Marzieh Salarvand*, M Sc- Variability of soil eco-physiological indices and plant diversity associated with different land use, Iran. (Completed)
11-*Sakineh Mollayee Darabi*, M Sc- Dynamic of soil gas fluxes and base cations in relation to pit and mound landscapes of Beech forest stand (Case study: Darabkola Forest), Iran. (Completed)
12-*Razieh Rafiyee Jahed*, M Sc- Effect of land cover on variability of controlling factors of the most important greenhouse gases and base cations of soil (Case Study: Chamestan Forest of Noor), Iran. (Completed)
13-*Masomeh Soleimani*, M Sc- Effect of native and non-native plantations on stability of soil aggregate and particulate organic matter (Case Study: Forest Seed Center of Khazar), Iran. (Completed)
14-*Kosha Parsamehr*, M. Sc- Land change modeling of Mazandran Province and its implication in identifying optimal areas for reducing emissions from deforestation and forest degradation (REDD) projects. (Completed)
15-*Masoud Baran Cheshmeh*, M. Sc- Comparison of understory woody species and soil properties in popolar and alder monocultures. (A case study: Gorgisara-Mazandaran). (In Progress)
16- *Mohammad Bayranvand*, M. Sc- Analysis of morpho-functional structure of humus forms in relation to tree ecological groups. (In Progress)
17-*Fatemeh Rostayee*, M. Sc- The effect of *Alnus subcordata* L., *Poplus deltoids* L. and *Taxadium distichum* L. Rich plantations on soil fine root biomass and net nitrogen mineralization. (In Progress)
18-*Maryam Fazlolahi*, PhD- Effect of catena landscape on soil eco-physiological indices and some features of Oriental Beech (*Fagus orientalis* Lipsky) stand, Iran. (In Progress)
19-*Behzad Bakhshandeh Navrodi*, PhD- Influence of tree diversity on herb-layer diversity and some soil properties in Oriental Beech forests (Case study: Beech Forest of Asalem-Guilan Province). (In Progress)
20-*Mahya Tafazzoli*, PhD- Reclamation of contaminated forest soil using paper mill sludge and nanotechnology. (In Progress).
21-*Kheirollah Sheikholeslami*, M. Sc-The effect of broad-leaved and needle-leaved stands on understory covers and soil fertility (Neirang – Noushahr forest management planning). (In Progress).
22-*Roghayeh Farokhzadeh*, M. Sc-Growth, physiology and biochemical responses of forest species saplings to acidic rainfall richen with nitric and sulphuric acids. (In Progress).

23- *Kebrya Jafari*, M. Sc-The role of different land-uses on amounts of soil carbon sequestration. (In Progress).
24-*Faezeh Sadat Tarighat*, M. Sc-The effect of broad-leaved tree species on soil ammonification and nitrification process in a coastal forest stand. (In Progress).
25-*Behnaz Samadzadeh*, M. Sc-Variability analysis of soil carbon mineralization rate, nematode and earthworm populations in a plain forest stand. (In Progress).
26- *Akram Sadat Kazemi Sangdehi*, M. Sc- Effect of pseudomonas putida 169 on growth, gas exchanges and mineral absorbtion of Pinus nigra var. Pallasiana seedlings subjected to salinity stress. (In Progress).
27-*Negar Moghimian*, PhD- Analysis of soil ecochemical indices and cyanobacteria diversity in vadose zone under different land use variant. (In Progress).
28- *Zohre Zoghi*, PhD- Effects of biochar, zeolite and perlite on the soil improvement and physiology of Oak (Quercus castaneifolia C.A.M) seedlings characteristics under drought stress. (In Progress).
29-*Mohammad Kazem Parsapoor*, PhD- Dynamic of microbial catabolic diversity in relation to labile fractions of soil organic matter in nitrogen-fixing and non-nitrogen-fixing forest stands (In Progress).
30- *Razie Sanji*, M. Sc.- Comparison of litter quality, earthworm biomass and biochemical indices of soil under four afforested tree stands (In Progress).
31- *Baharak Abdollahzadeh*, PhD- Impact of tree mixture in rural plantation on greenhouse gases emission from the soil (A case study Khargoosh Dare Park- Tehran) (In Progress).
32- *Mohammad Bagher Mahmodi*, PhD- The effect of slope position in catena on stand biodiversity indices and soil eco-chemical properties in mixed forest of Beech, Asalem (In Progress).
33- *Seyed Mostafa Moslemi*, PhD- Effect of forest different types on plant diversity, soil microbial population and dynamics of greenhouse gases (GHG) at center Hyrcanian Forests (In Progress).

Research projects

- Nomination of Hyrcanian forest for inscription on the UNESCO world heritage list (In English, *completed*).
- With 5 research projects in Persian (*Completed*).

As reviewer

- World Applied Science Journal
- Forest Science and Practice Journal
- Journal of Forestry Research
- Journal of Forest Science
- European Journal of Soil Sciences
- Polish Journal of Environmental Studies
- Turkish Journal of Agriculture and Forestry
- Caspian Journal of Environmental Sciences
- Ecopersia
- Pedosphere
- IForest
- Plant Ecology and Evolution
- Environment, Development and Sustainability
- Journal of Biological Diversity (Biodiversitas)
- Journal of Nusantara Bioscience (Nus Biosci)
- Journal of Agricultural Science and Technology (JAST)
- and, as reviewer in 15 Iranian Journals (In Persian).

Scientific publications
A) Peer-reviewed publications (ISI) with Impact Factor

1-Lotfalian, M., Emadian, F., **Kooch, Y.** and Parsakhoo, A. 2010. A Method for Economic and Environmental Evaluation of Logging Damages on Regeneration and Stand in Southern Caspian Forests. *Scandinavian Journal of Forest Research*, 25 (1): 78 – 88.
Impact factor (2014): 1.537

2-**Kooch, Y.**, Hosseini, S.M., Zaccone, C., Jalilvand, H., Hojjati, S. M., 2012. Soil organic carbon sequestration as affected by afforestation: the Darab Kola forest (North of Iran) case study. *Journal of Environmental Monitoring*, 14(9): 2438-2446.
Impact factor (2014): 2.109

3-**Kooch, Y.**, Zaccone, C., Lamersdorf, N. P., Tonon, G. 2014. Pit and mound influence on soil features in an Oriental Beech (*Fagus orientalis* Lipsky) forest. *European Journal of Forest Research*, 133: 347-354.
Impact factor (2014): 2.095

4-**Kooch, Y.**, Hosseini, S. M., Samonil, P. and Hojjati, S. M. 2014. The effect of windthrow disturbances on biochemical and chemical soil properties in the Northern mountainous forests of Iran. *Catena*, 116: 142 - 148.
Impact factor (2014): 2.612

5-**Kooch, Y.**, Mollaei Darabi, S. and Hosseini, S. M. 2015. The effects of pits and mounds following windthrow events on soil features and greenhouse gas fluxes in a temperate forest. *Pedosphere*, 25: 1-13.
Impact factor (2014): 1.500

6-Fazlolahi Mohammadi, M., Jalali, S. Gh., **Kooch, Y.** and Theodose, T. A. 2015. The influence of landform on the understory plant community in a temperate Beech forest in northern Iran. *Ecological Research*, 30: 385–394.
Impact factor (2014): 1.296

7-Bakhshandeh, B., Abrari, K., Pilehvar, B. and **Kooch, Y**. 2015. Interactions between tree and herb layers vegetation along a gradient of tree composition in Hyrcanian forests. *Russian Journal of Ecology*, 46: 483–486.
Impact factor (2014): 0.390

8- Fazlolahi Mohammadi, M., Jalali, S. Gh., **Kooch, Y.** and Said-Pullicino, D. 2016. Slope gradient and catena shape effects on soil profiles in the northern mountainous forests of Iran. *Eurasian Soil Science*. 49: 1366-1374.
Impact factor (2014): 0.628

9- **Kooch, Y.**, Moghimian, N., Bayranvand, M. and Alberti, G. 2016. Changes of soil carbon dioxide, methane and nitrous oxide fluxes in relation to land use/cover management. *Environmental Monitoring and Assessment*. 188: 346.
Impact factor (2014): 1.679

10- **Kooch, Y.**, Rostayee, F. and Hosseini, S. M. 2016. Effects of tree species on topsoil properties and nitrogen cycling in natural forest and tree plantations of northern Iran. *Catena*, 144: 65–73.

Impact factor (2014): 2.612

11- Fazlolahi Mohammadi, M., Jalali, S. Gh., **Kooch, Y.** and Theodose, T. A. 2017. Tree species composition, biodiversity and regeneration in response to catena shape and position in a Hyrcanian mountain forest. *Scandinavian Journal of Forest Research*. 32 (1): In Press. http://dx.doi.org/10.1080/02827581.2016.1193624.
Impact factor (2014): 1.537

12- Moghimian, N., Jalali, S. Gh., **Kooch, Y.** and Rey, A. 2017. Downed logs improve soil properties in old-growth temperate forests of Northern Iran. *Pedosphere*. Accepted to publish.
Impact factor (2014): 1.500

13- Fazlolahi Mohammadi, M., Jalali, S. Gh., **Kooch Y.** and Daniel Said-Pullicino. 2017. The effect of landform on soil microbial activity and biomass in a Hyrcanian Oriental Beech stand. *Catena*, 149: 309-317.
Impact factor (2014): 2.612

14- **Kooch, Y.**, Samadzadeh, B. and Hosseini, S. M. 2017. The effects of broad-leaved tree species on litter quality and soil properties in a plain forest stand. *Catena*, 150: 223–229.
Impact factor (2014): 2.612

15- Bayranvand, M., **Kooch, Y.**, Hosseini, S. M. and Alberti, G. 2017. Humus forms in relation to altitude and forest types in the northern mountainous regions of Iran. *Forest Ecology and Management*, 385: 78-86.
Impact factor (2014): 2.820

16- **Kooch, Y.**, Tarighat, F. S. and Hosseini, S. M. 2017. Tree species effects on soil chemical, biochemical and biological features in mixed Caspian lowland forests. *Trees*. Accepted to publish.
Impact factor (2014): 1.706

17- Samadzadeh, B., **Kooch, Y.** and Hosseini, S. M. 2017. Linkages of litter and soil C: N: P stoichiometry in a temperate broad-leaved forest stands. *Eurasian Soil Science*. Accepted to publish.
Impact factor (2014): 0.740

B) Publications (ISI) without Impact Factor

1-**Kooch, Y.**, Jalilvand, H., Bahmanyar, M. A. and Poormajidian, M. R. 2007. Ecological distribution of indicator species and effective edaphical factors on the northern Iran lowland forests. *Journal of Applied Sciences*, 7 (11): 1475 – 1483.

2-**Kooch, Y.**, Jalilvand, H., Bahmanyar, M. A. and Poormajidian, M. R. 2008. Abundance, biomass and vertical distribution of earthworms in ecosystem units of hornbeam forest. *Journal of Biological Sciences*, 8 (6): 1033 – 1038.

3-**Kooch, Y.**, Hosseini, S. M., Mohammadi, J. and Hojjati, S. M. 2010. The effects of gap disturbance on soil chemical and biochemical properties in a mixed beech – hornbeam forest of Iran. *Ecologia Balkanica*, 2 (1): 39 – 56.

4-**Kooch, Y.**, Hosseini, S. M., Mohammadi, J. and Hojjati, S. M. 2012. Determination of the best canopy gap area on the basis of soil characteristics using of analytical hierarchy process (AHP). *Folia Forestalia Polonica*, 54 (1): 15 – 24.

5-**Kooch, Y.**, Hosseini, S. M., Mohammadi, J. and Hojjati, S. M. 2012. Effects of uprooting tree on herbaceous species diversity, woody species regeneration status and soil physical characteristics in a temperate mixed forest of Iran. *Journal of Forestry Research*, 23 (1): 81 – 86.

6-Haghdoost, N., Akbarinia, M., Hosseini, S. M. and **Kooch, Y.** 2011. Conversion of Hyrcanian degraded forests to plantations: Effects on soil C and N stocks. *Annals of Biological Research*, 2 (5): 385 – 399.

7-Tabari, M., Ahmadloo, F., Yousefzadeh, Y. and **Kooch, Y.** 2012. Effects of soil nutritional status on seedling nursery performance of Arizona cypress (Cupressus arizonica var arizonica Greene) and Medite cypress (Cupressus sempervirens var. horizantalis (Mill.) Gord). *African Journal of Plant Science*, 6 (4): 140 – 149.

8-**Kooch, Y.** 2012. Response of earthworms' ecological groups to decay degree of dead trees (Case study: Sardabrood Forest of Chalous, Iran). *European Journal of Experimental Biology*, 2 (3): 532 - 538.

9- **Kooch, Y.**, Hosseini, S. M., Mohammadi, J. and Hojjati, S. M. 2013. Soil nutrients status in an old-growth northern hardwood forest: effects of beech and hornbeam individual tree. *Advanced Crop Science*, 3 (2): 171 – 180.

10- Moghimian, N., Habashi, H. and **Kooch, Y.** 2013. Response of soil mesofauna to different afforested types in the north of Iran. *Journal of Applied Environmental and Biological Sciences*, 3(4): 34 - 45.

11- **Kooch, Y.**, Hosseini, S. M., Mohammadi, J. and Hojjati, S. M. 2013. Variability of soil physical indicators imposed by beech and hornbeam individual trees in a local scale. *Biodiversitas*, 14 (1): 25 - 30.

12- Mollaei Darabi, S., **Kooch, Y.** and Hosseini S. M. 2014. Reaction and fractal description of soil bio-indicator to human disturbance in lowland forests of Iran. *Biodiversitas*, 15 (1):58-64.

13- **Kooch, Y.** and Zoghi, Z. 2014. Comparison of soil fertility of Acer insigne, Quercus castaneifolia, and Pinus brutia stands in the Hyrcanian forests of Iran. *Chinese Journal of Applied and Environmental Biology*, 20 (5): 899-905.

14- Rafeie Jahed, R., Hosseini, S. M. and **Kooch, Y.** 2014. The effect of natural and planted forest stands on soil fertility in the Hyrcanian region, Iran. *Biodiversitas*, 15 (2): 206 - 214.

15- Gheibi, F., Akbarinia, M. and **Kooch, Y.** 2015. Effect of Alnus subcordata, Acer insigne and Sequoia sempervirens plantations on plant diversity in Hyrcanian forest of Iran. *Biodiversitas*, 16 (1): 10 - 15.

16- Soleimany Rahimabady, M., Akbarinia, M. and **Kooch, Y.** 2015. The effect of land covers on soil quality properties in the Hyrcanian regions of Iran. *Journal of BioScience and Biotechnology*, 4(1): 73-79.

17- **Kooch, Y.**, Hosseini, S. M., Scharenbroch, B. C., Hojjati, S. M. and Mohammadi, J. 2015. Pedodiversity analysis in the Caspian forests of Iran. *Geoderma Regional*, 5 (1): 4-14.

C) Research publications (non-ISI)

1-**Kooch, Y.**, Hosseini, S. M. and Akbarinia, M. 2008. The Ecological Effects of Pit and Mounds Created by Catastrophic Windthrow on Understory of Hyrcanian Forests. *Journal of Silva Balcanica*, 9 (1): 13 – 28.

2-**Kooch, Y.** and Hosseini, S. M. 2010. Response of Earthworms Biomass and Diversity to Windthrow Events and Soil Properties in Hyrcanian Forests of Iran. *Folia oecologica*, 37 (2): 181 – 190.

3-**Kooch, Y.**, Hosseini, S. M., Mohammadi, J. And Hojjati, S. M. 2011. Analysis of Earthworms Patchy Distribution and Variability of Soil Biochemical Properties under Single - Tree Influences. *International Journal of Environmental Research*, 1 (7): 1813 – 1829.

4-Khalilpour, H., Hosseini, S. A., Jalilvand, H., Lotfalian, M., **Kooch, Y.**, Akbari, R. A. and Sohrabi, V. 2010. Determination of the Most Effective Factor on Sediment Production Due to Road in Forest Mountainous Roads. *World Applied Sciences Journal*, 10 (9): 1069 – 1076.

5-Zoghi, Z., Azadfar, D. and **Kooch, Y.** 2011. Influence of physiographic factors on vegetative and morphological characters of Beech plus trees - A case study in Hyrcanian forest. *International Journal of Environmental Sciences*, 1 (7): 839 – 846.

6-Lotfalian, M., Porkia, A., **Kooch, Y.** and Sarikhani, N. 2011. Determination of correction coefficient of skidding distance according to existing road network in Lalis forest of Iran. *International Journal of Natural and Engineering Science*, 5 (3): 9 – 11.

7-Jalilvand, H. and **Kooch, Y.** 2012. Factors influence the distribution and abundance of earthworm communities in difference forest types (man – made and natural forests). *International Journal of Green and Herbal Chemistry*, 1 (1): 26 – 38.

8-Ahmadi, A., Fallah, A. Jalilvand, H. and **Kooch, Y.** 2008. Determining the Best Form Factor Formula for Zarbin (*Cupressus sempervirence* var. horzontalis) in North of Iran. *Asian Journal of Biological Sciences*, 1 (1): 39 – 44.

9-Lotfalian, M., Sam Daliri, H., Hosseini, S. A., **Kooch, Y.** and Hadizadeh, Gh. 2012. Determination of the most allowable slope of strip road for skidding timber jack 450C. *International Journal of Science and Nature*, 3 (3): 502 - 506.

10- **Kooch, Y.**, Hosseini, S. M., Mohammadi, J. and Hojjati, S. M. 2013. Effects of pit and mound landscape on soil ecosystem engineers at local scales - a case study in Hyrcanian forest. *Molecular Soil Biology*, 4 (2): 7 - 15.

11- **Kooch, Y.**, Hosseini, S. M., Mohammadi, J. and Hojjati, S. M. 2013. Variability of light and soil physics indicators following gap formation in the Caspian forest, Iran. *Environmental Science: An Indian Journal*, 8 (6): 244 – 251.

12- Mollaei Darabi, S., **Kooch, Y.** and Hosseini S. M. 2014. Dynamic of plant composition and regeneration following windthrow in a temperate beech forest. *International Scholarly Research Notices*, 9 page, Article ID 421457, http://dx.doi.org/10.1155/2014/421457.

13- Karami, P., Hosseini, S. M., Rahmani, A., **Kooch, Y.** and Mokhtari, J. 2014. The effects of pure and mixed plantations of Alder (*Alnus subcordata* C.A.Mey) and Poplar (*Populus deltoides* Marsh.) on earthworm abundance and biomass. *International Journal of Environmental Engineering Research*, 3 (1): 7-14.

14- **Kooch, Y.**, Theodose, T. A., and Samonil, P. 2014. The role of deforestation on spatial variability of soil nutrients in a Hyrcanian forest: an analysis of fractal and geostatistic. *Ecopersia,* 2 (4): 779-803.

15- **Kooch, Y.**, Rostayee, F. and Hosseini, S. M. 2015. Soil quality indices in pure and mixed forest stands of southern Caspian region. *Ecopersia*, 3 (2): 987-1001.

- and 42 published papers in Iranian Journals (In Persian).

D) Articles in Conference Proceedings, and National or International

1-Lotfalian, M., Parsakhoo, A. and **Kooch, Y**. 2008. Reactions between Annual Rings and Timber Logging. News of Forest History, EuroDendro, the long history of wood utilization, publishing abstract in the collection.

2- **Kooch, Y.**, Hosseini, S. M., Mohammadi, J. and Hojjati, S. M. 2010. The ecological effects of wind on soil nutrition elements status in the Hyrcanian forests of Iran. First Serbian forestry congress, 11-13 November 2010, Belgrade, Republic of Serbia, page 211 (Publishing abstract in the collection).

3- **Kooch, Y.** 2015. Soil biological and biochemical activity in response to season and excessive moisture in a mixed oak stand, northern Iran. In: Brabcová V., Kyselková M., Navrátilová D., Pospíšek M., Baldrian P. (Eds.), 2015. Ecology of Soil Microorganisms - Book of Abstracts, Prague, November 29 – December 3, 2015, 357 pp.

- and 63 published papers in Iranian conferences and congresses (In Persian).

E) Book publication

- Ecology of forest soils (concepts and algorithms), Jahad-daneshgahi of Mazandaran publications, 414p (In Persian).

Yahya Kooch