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PROFESSIONAL PROFILE:

Associate Professor of Medicinal and Aromatic Plants in Shahid Chamran University (SCU) of Ahvaz

EDUCATION BACKGROUND:

Ph.D.: Physiology of Medicinal and Aromatic Plants (2010), Tarbiat Modares University, Tehran, Iran

Thesis Title:

“Effect of Drought Stress on Some Morphological, Physiological and Biochemical Characteristics in Anise hyssop (*Agastache foeniculum* [Pursh] Kuntze)”

M.Sc.: Pomology (2006), Tarbiat Modares University, Tehran, Iran

Dissertation Title:

“Pollination, pollen tube growth and determination of the best pollinizer for sweet cherry (*Prunus avium* L. cv. Red Rezaeieh)”

B.Sc.: Horticultural Science Engineering (2003), Ferdowsi University of Mashhad, Mashhad, Iran

TEACHING AND TRAINING EXPERIENCE:

- Cultivation of Medicinal and Aromatic Plants for B.Sc. students
- Physiology of Medicinal and Aromatic Plants for M.Sc. students
- Plant Biochemistry for PhD students

INTERESTS AND RESEARCH FIELDS:

- Stress Physiology of Medicinal Plant
- Medicinal Plant Production
- Domestication of Medicinal and Aromatic Plants
- Extraction of Secondary metabolites, Identification and Isolation

RESEARCH ACTIVITIES:

CONFERENCE PRESENTATIONS:

1. Malekzadeh, M., Mahmoodi Sourestani, M., and Omidbaigi, R. (2010) Diurnal changes in net photosynthesis rate, stomatal conductance and transpiration rate in leaves of *Agastache foeniculum* under normal and stress conditions. *First international congress of medicinal plant*, Shiraz, Iran.
2. Malekzadeh, M., Mahmoodi Sourestani, M., Omidbaigi, R. and Ebrahimzadeh, H. (2010) The Effect of Drought Stress on Percentage of Essential Oil and Constituents of *Agastache Foeniculum* at Third Harvest. *First international congress of medicinal plant*, Shiraz, Iran.
3. Ferrareze, M., Mahmoodi Sourestani, M., Quatrini, E. and Ferrante, A. (2010) Biofortification of spinach plants applying selenium in the nutrient solution of floating system. *2nd International Conference Effect of Pre- and Post-harvest Factors on Health Promoting Components and Quality of Horticultural Commodities*, Skierniewice, Poland.
4. Mahmoodi Sourestani, M. (2016) Photosynthetic behavior of lemon balm, catnip, holy basil and sweet basil under heat stress. *9th Conference on Medicinal and Aromatic Plants of Southeast European Countries*, Plovdiv, Bulgaria.
5. Mahmoodi Sourestani, M., Moghimipour, Z. and Moghaddam, E. (2016) Improvement of gas exchange of holy basil (*Ocimum sanctum* L.) under environmental stresses by Fe and Zn fertilization. *9th Conference on Medicinal and Aromatic Plants of Southeast European Countries*, Plovdiv, Bulgaria.
6. Mahmoodi Sourestani, M., Omidbaigi, R., Sabaghnia, N. and Mohebodini, M. (2007) The effect of different treatments on seed dormancy and germination of lovage (*Levisticum officinalis*). *The 3rd Congress of Medicinal Plants*, Tehran, Iran.

7. Mahmoodi Sourestani, M. (2016) Oil content, yield and composition of spearmint (*Mentha spicata* L. var. Kashan) at different cuts. *The first Iranian seminar of essential oil*, Qamsar, Iran.
8. Mahmoodi Sourestani, M. (2016) *Mentha longifolia* (L.) Huds. essential oil and its main constituents affected by harvest time. *The first Iranian seminar of essential oil*, Qamsar, Iran.
9. Mahmoodi Sourestani, M. (2016) Oil content, yield and composition of spearmint (*Mentha spicata* L. var. Kashan) at different cuts. *The first Iranian seminar of essential oil*, Qamsar, Iran.
10. Boveiri Dehsheikh, A., Mahmoodi Sourestani, M. (2019) Changes in chlorophyll content of different species of Basil and Mint plants at different times of the day. *11th Iranian Congress of Horticultural Sciences*, Urmia, Iran.
11. Boveiri Dehsheikh, A., Mahmoodi Sourestani, M., Zolfaghari, M., and Enayatizamir, N. (2016) Effect of biofertilizers, chemical fertilizer and humic acid on essential oil content, yield and composition of Basil (*Ocimum basilicum* var. thrysiflora). *5th National Congress on Medicinal Plants*, Isfahan, Iran.
12. Boveiri Dehsheikh, P., Mahmoodi Sourestani, M., and Boveiri Dehsheikh, A. (2016) To investigation of monthly variations in essential oil of Arabian Lilac (*Vitex trifolia* var. *purpurea*) from Ahwaz of Iran. *5th National Congress on Medicinal Plants*, Isfahan, Iran.
13. Boveiri Dehsheikh, A., Mahmoodi Sourestani, M., Zolfaghari, M., and Enayatizamir, N. (2016) Effect of biofertilizers, chemical fertilizer and humic acid on growth parameters of Basil (*Ocimum basilicum* var. thrysiflora). *9th Iranian Congress of Horticultural Sciences*, Ahvaz, Iran.
14. Boveiri Dehsheikh, A., Mahmoodi Sourestani, M., Zolfaghari, M., and Enayatizamir, N. (2016) Effect of biofertilizers, chemical fertilizer and humic acid on physiological parameters of Basil (*Ocimum basilicum* var. thrysiflora). *9th Iranian Congress of Horticultural Sciences*, Ahvaz, Iran.

PAPERS:

1. Mahmoodi Sourestani, M. and Akbarzade, M. (2014). Seasonal changes in essential oil content yield and composition of spearmint cultivated in Shoshtar. *Agricultural Crops Management*. 16, 613-625.
2. Omidbaigi, R. and Mahmoodi Sourestani, M. (2010). Effect of irrigation regimes on the essential oil content and composition of *Agastache foeniculum*. *Journal of Essential Oil Bearing Plants*. 13, 59-6.
3. Mahmoodi Sourestani, M. (2013). Diurnal variations of gas exchange characteristics in leaves of anise hyssop (*Agastache foeniculum*) under normal, drought stress and recovery conditions. *Journal of Medicinal Plants and By-products (JMPB)*. 2, 91- 101.

4. Mahmoodi Sourestani, M., Malekzadeh, M., and Tava, A. (2014). Influence of drying, storage and distillation times on essential oil yield and composition of anise hyssop (*Agastache foeniculum* (Pursh.) Kuntze). *Journal of Essential Oil Research*. 26, 177- 184.
5. Mahmoodi Sourestani, M. and Akbarzade, M. (2015). The effect of harvest time on essential oil content, yield and composition of spearmint (*Mentha spicata* L.) in the Hamidiyeh region. *Journal of Plant Production*. 38, 115-129.
6. Saeedfar, S., Negahban, M. and Mahmoodi Sourestani, M. (2015). The Effect of Drought Stress on the Essential Oil Content and Some of the Biochemical Characteristics of Anise Hyssop (*Agastache foeniculum* [Pursh] Kuntze). *European Journal of Molecular Biotechnology*. 8, 103-114.
7. Badvi, H., Alemzade Ansari, N., Mahmoodi Sourestani, M. and Eskandari, F. (2015). Effects of drought stress and mycorrhizal fungi on some morphophysiological characteristics of lettuce (*Lactuca sativa* L.). *Journal of Plant Production*, 38, 27-39.
8. Moghadam, E., Mahmoodi Sourestani, M., Farrokhian Firozi, A., Ramazani, Z. and Eskandari, F. (2015). The effect of foliar application of iron chelate type on morphological traits and essential oil content of holy basil. *Agricultural Crops Management*. 17, 595-606.
9. Moghimipour, Z. Mahmoodi Sourestani, M., Alemzade Ansari, N, and Ramazani, Z. (2015). The influence of foliar application of nano zinc chelate and zinc sulfate on morphological traits of holy basil (*Ocimum sanctum* L.). *Journal of Plant Production*. 38, 41-53.
10. Moghadam, E., Mahmoodi Sourestani, M., Farrokhian Firozi, A., Ramazani, Z. and Eskandari, F. (2016). Effects of iron foliar application on the number and size of glandular trichomes and essential oil content and composition of holy basil (*Ocimum sanctum* L.) at first and second. *Iranian Journal of Medicinal and Aromatic plants*. 32, 174-188.
11. Moghimipour, Z., Mahmoodi Sourestani, M. and Alemzade Ansari, N. (2016). Effects of foliar application of nano zinc chelate and zinc sulfate on zinc content, pigments and photosynthetic indices of holy basil (*Ocimum sanctum* L.). *Journal of Horticulture Science*. 30, 242-250.
12. Moghadam, E., Mahmoodi Sourestani, M. and Farrokhian Firozi, A. (2016). The effect of foliar application of iron on some biochemical and photosynthetic characteristics of Holy basil (*Ocimum sanctum* L.). *Iranian Journal of Horticulture Science*. 47 (3): 543-552.
13. Mahmoodi Sourestani, M. (2016). The study on diurnal changes in leaf gas exchange of lemon balm, catnip, holy basil and sweet basil in Ahvaz. *Journal of Horticulture Science*. 30, 395-405.
14. Mahmoodi Sourestani, M., Derikvandi, M., Chehrazhi, M., and Jafari, A.A. (2016). Evaluation of growth, seed yield and oil quantity and quality of some borage (*Borago officinalis* L.) populations and cultivars under Ahvaz weather condition. *Iranian Journal of Medicinal and Aromatic plants*. 32, 598-610.
15. Mahmoodi Sourestani, M. and Akbarzade, M. (2016). Comparison of the Essential Oil Content and Composition of Fresh Leaf and Flower of Spearmint (*Mentha spicata* L.)

- Cultivated in Hamidieh and Shoshtar Locations at Different *Harvest Times*. *Plant Production Technology*. 16, 193-205.
16. Boveiri Dehsheikh, A., Mahmoodi Sourestani, M., Zolfaghari, M., and Enayatizamir, N. (2017). The effect of plant growth promoting rhizobacteria, chemical fertilizer and humic acid on morpho-physiological characteristics of basil (*Ocimum basilicum* var. *thrysiflorum*). *Journal of Sustainable Agriculture and Production Science*. 26, 129-142.
 17. Moghimipour, Z., Mahmoodi Sourestani, M., Alemzadeh Ansari, N. and Ramazani, Z. (2017). The effect of foliar application of zinc on essential content and composition of holy basil (*Ocimum sanctum*) at first and second harvests. *Journal of Essential Oil Bearing Plants*. 20, 449-458.
 18. Boveiri Dehsheikh, P., Mahmoodi Sourestani, M., Zolfaghari, M., and Enayatizamir, N. (2017). The study on the effect of biological and chemical fertilizers and humic acid on the growth, physiological characteristics and essential oil content of catnip (*Nepeta cataria* L.). *Journal of Plant Production Research*. 24, 61-76.
 19. Mahmoodi Sourestani, M. (2018). Essential oil quantity and quality of two ecotypes of spearmint (*Mentha spicata* L.) In different harvesting times. *Journal of Horticulture Science*. 3, 825-835.
 20. Momeni Monfared, M. Mahmoodi Sourestani, M., Zolfaghari, M. and Malekzadeh, M. (2018). Evaluation of quantitative and qualitative characteristics of essential oil of some Basil (*Ocimum basilicum*) accessions in Ahvaz weather conditions. *Iranian Journal of Medicinal and Aromatic plants*. 34, 286-297.
 21. Hosseini, H.M., Chehraz, M., Nabati Ahmadi, D. and Mahmoodi Sourestani, M. (2018). Colchicine-induced autotetraploidy and altered plant cytogenetic and morphophysiological traits in *Catharanthus roseus* (L.) G. Don. *Advances in Horticultural Science*. 32, 229-238.
 22. Piri, E., Mahmoodi Sourestani, M., Khaleghi, E., Mottaghipisheh, J., Zomborszki, Z.P., Hohmann, J. and Csupor, D. (2019). Chemo-diversity and antiradical potential of twelve *Matricaria chamomilla* L. populations from Iran: proof of ecological effects. *Molecules*. 24, 1315.
 23. Bagherifar, S., Mahmoodi Sourestani, M., Zolfaghari, M., Mottaghipisheh, J., Zomborszki, Z. P., and Csupor, D. (2019). Chemodiversity of Volatile Oil Contents of Various Parts of 10 Iranian *Prangos ferulacea* Accessions, With Analysis of Antiradical Potential. *Natural Product Communications*. 14, 1-9.
 24. Boveiri Dehsheikh, A., Mahmoodi Sourestani, M., Boveiri Dehsheikh, P., Vitalini, S., Iriti, M., and Mottaghipisheh, J. (2019). A Comparative Study of Essential Oil Constituents and Phenolic Compounds of Arabian Lilac (*Vitex trifolia* var. *Purpurea*): An Evidence of Season Effects. *Foods*. 8, 51-65.
 25. Boveiri Dehsheikh, A., Mahmoodi Sourestani, M., Boveiri Dehsheikh, P., Mottaghipisheh, J., Vitalini, S., and Iriti, M. (2020). Monoterpenes: Essential Oil Components with Valuable Features. *Mini-Reviews in Medicinal Chemistry*. 20, 1-16.

26. Boveiri Dehsheikh, A., Mahmoodi Sourestani, M., Zolfaghari, M. and Enayatizamir, N. (2020). Changes in soil microbial activity, essential oil quantity, and quality of Thai basil as response to biofertilizers and humic acid. *Journal of Cleaner Production*. 256, 1- 10.
27. Mollaeia, S., Ebadi, M., Hazrati, S., Habibi, B., Gholami, F., Mahmoodi Sourestani, M. (2020). Essential oil variation and antioxidant capacity of *Mentha pulegium* populations and their relation to ecological factors. *Biochemical Systematics and Ecology*. 9, 1-7.
28. Mottaghipisheh, J., Mahmoodi Sourestani, M., Kiss, T., Horvath, A., Tótha, B., Ayanmanesh, M., Khamushi, A. and Csupor, D. (2020). Comprehensive chemotaxonomic analysis of saffron crocus tepal and stamen samples, as raw materials with potential antidepressant activity. *Journal of Pharmaceutical and Biomedical Analysis*. 184, 1-9.
29. Mottaghipisheh J., Boveiri Dehsheikh, A., Mahmoodi Sourestani, M, Kiss, T., Hohmann, J., and Csupor, D. (2020). *Ducrosia* spp., Rare Plants with Promising Phytochemical and Pharmacological Characteristics: *An Updated Review*. *Pharmaceuticals*. 13, 172-195, 2020.

PROFESSIONAL MEMBERSHIPS:

- Member of Iranian Horticultural Science Association
- Member of Iranian Medicinal Plants Society
- Editorial board of Journal of Plant Productions (Shahid Chamran University of Ahvaz)
- Editorial board of Iranian Journal of Horticultural Science (Ferdowsi University of Mashhad)
- Editorial board of Journal of Horticultural Science

LANGUAGES:

- Persian (native)
- English (medium)