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Languages:

Persian (Native)
 English (Advanced)
 Norwegian (Intermediate)
 Danish (Basic)



Work Experience

2022- **Researcher**- Norwegian Institute of Bioeconomy Research (NIBIO), Ås, Norway
 2024 **Guest Researcher**- University of Copenhagen, Tåstrup, Denmark
 2020- 2022 **Postdoc**- Norwegian Institute of Bioeconomy Research (NIBIO), Ås, Norway
 2017- 2020 **Academic Employee/Research Assistant**- University of Copenhagen, Tåstrup, Denmark
 2016- 2017 **Guest PhD student**- University of Copenhagen, Tåstrup, Denmark
 2014- 2016 **Guest PhD student**- Agricultural Biotechnology Research Institute of Iran, Karaj, Iran
 2011- 2012 **Research Assistant**- Seed and Plant Improvement Institute, Karaj, Iran
 2010- 2011 **Guest MSc student**- Seed and Plant Improvement Institute, Karaj, Iran
 2008- 2009 **Internship**- Agriculture and Natural Resources Engineering Organization of Iran, Tehran, Iran

Education

2012- 2018 **PhD in Agronomy**- Shahrood University of Technology, Shahrood, Iran
 2009- 2011 **MSc in Agronomy**- Science and Research Branch- Azad University, Tehran, Iran
 2007- 2011 **BSc in English Language Teaching**- South Tehran Branch- Azad University, Tehran, Iran
 2003- 2007 **BSc in Plant Protection**- Science and Research Branch- Azad University, Tehran, Iran

Projects:

2021- Herbicide testing in cereals, oilseed- and protein- crops (In collaboration with plant protection companies and Norwegian Agricultural Extension Service (Norsk Landbruksrådgiving- NLR))- **Activity leader**
 2024 Method development for treating soil infested with alien species- **WP leader**
 2024-2025 Low-risk pesticides against pests in cereals and potatoes in Norway
 2023-2026 Weeds vs. Crops: The Winner of Climate Change- **Project leader**
<https://www.nibio.no/en/projects/weeds-vs-crops-the-winner-of-climate-change?locationfilter=true>
 2023-2024 Contaminants in Norwegian honey – herbicide (Clopyralid) and toxic plant compounds (Pyrrolizidine Alkaloids)- **Project leader**
 2022 Control of garden lupine (*Lupinus polyphyllus*) in connection with the restoration of habitat for the large scabious mining bee (*Andrena hattorfiana*)- **Project leader**

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| 2022- 2023 | Chlorophyll fluorescence measurement- a rapid and cost-effective tool for detection of herbicide resistance in fields |
| 2021- 2025 | ResourceReturn- New steam technology converts biologically contaminated soil masses and plant wastes into new resources- Task leader |
| 2021- 2024 | IAS/EcoSystemCARE- An integrated approach to ecosystems protection against invasive alien plants in southern Poland |
| 2020- 2022 | BIOIMMIGRANTS- Innovative approaches and technologies to manage invasive alien species threatening biobased production- Postdoc project |
| 2019- 2020 | Clopyralid in honey |
| 2018- 2019 | Use of drones and imaging to assist site-specific application of growth regulators |
| 2017- 2020 | Sweedhart- Separation of weeds during harvesting and hygienisation to enhance crop productivity in the long term |
| 2014- 2017 | Ecophysiological evaluation of fenugreek ecotypes response to late season water stress under biochar application and non-application conditions- PhD project |
| 2010- 2011 | Nitrogen rates effects on qualitative and quantitative traits of spring safflower under different temperature regimes- MSc project |

Supervision and Teaching

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| 2022- | Co-supervision- PhD student: 1, Master student: 1, Bachelor student: 1 Norwegian Institute of Bioeconomy Research (NIBIO), Ås, Norway |
| 2018- 2019 | Co-supervision (unofficial)- 4 Master students University of Copenhagen, Tåstrup, Denmark |
| 2018- 2019 | Teaching Assistant- “Weed Biology and Management” at Master level University of Copenhagen, Tåstrup, Denmark |
| 2013- 2014 | Teaching Assistant- “Crop Ecophysiology” at Bachelor and Master level Shahrood University of Technology, Shahrood, Iran |

Management Committee

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| 2022- 2026 | EU COST Network: CA21134 TOP-AGRI-Network (Towards Zer0 Pesticide AGRiculture: European Network for sustainability) |
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Track Record **H-index: Google Scholar (13) - Web of Science (7)**

Journal Papers

- 1. Bitarafan Z.,** C. Glasner, C. Andreasen (2023) Weed seeds in pelletized chaff do not germinate. *Advances in Weed Science*, 41: e020230002.
- 2. Andreasen C.,** J. Rasmussen, **Z. Bitarafan** (2023) Site-Specific Seed Yield Prediction of Red Fescue (*Festuca rubra* L.) Based on Drone Imaging and Local Regression Models. *Agronomy*, 13 (2), 316.
- 3. Mirahmad M.,** S. Mohseni, O. Tabatabaei Malazy, F. Esmaeili, S. Alatab, R. Bahramsoltani, H S. Ejtahed, H. Qulami, **Z. Bitarafan**, B. Arjmand, E. Nazeri (2023) Antioxidative Hypoglycemic Herbal Medicines with in vivo and in vitro Activity against C-reactive Protein; A Systematic Review. *Phytomedicine* 109, 154615.
- 4. Bitarafan Z.,** C. Andreasen (2022) Fecundity Allocation in Some European Weed Species Competing with Crops. *Agronomy, Special Issue Weed Population Dynamics*, 12(5), 1196.

5. Hansted L., C. Crocoll, **Z. Bitarafan**, C. Andreasen (2022) Clopyralid Applied to Winter Oilseed rape (*Brassica napus* L.) Contaminates the Food Products Nectar, Honey and Pollen. *Food Control*, 140, 109124.
6. **Bitarafan Z.**, W. Kaczmarek-Derda, T.W. Berge, K.S. Tørresen, I.S. Fløistad (2022) Soil Steaming to Disinfect *Echinochloa crus-galli*-Infested Soil Masses. *Weed Technology*, 36(1): 177-185.
7. **Bitarafan Z.**, W. Kaczmarek-Derda, L.O. Brandsæter, I.S. Fløistad (2021) Stationary Soil Steaming to Combat Invasive Plant Species for Soil Relocation. *Invasive Plant Science and Management*, 14: 164-171.
8. **Bitarafan Z.**, C. Andreasen (2020) Seed Retention of Ten Common Weed Species at Oat Harvest Reveals the Potential for Harvest Weed Seed Control. *Weed Research*, 60(5): 343-352.
9. **Bitarafan Z.**, C. Andreasen (2020) Seed Production and Retention at Maturity of Blackgrass (*Alopecurus myosuroides*) and Windgrass (*Apera spica-venti*) at Wheat Harvest. *Weed Science*, 68(2): 151-156.
10. **Bitarafan Z.**, C. Andreasen (2020) Harvest Weed Seed Control: Seed Production and Retention of *Fallopia convolvulus*, *Sinapis arvensis*, *Spergula arvensis* and *Stellaria media* at Spring Oat Maturity. *Agronomy*, 10(1): 46.
11. Shumilina E., C. Andreasen, **Z. Bitarafan**, A. Dikiy (2020) Determination of Glyphosate in Dried Wheat by ¹H-NMR Spectroscopy. *Molecules*, 25(7): 1546.
12. **Bitarafan Z.**, S.M. Jensen, F. Liu, C. Andreasen (2019) Intercropping Fenugreek (*Trigonella foenum-graecum* L.) and Barley (*Hordeum vulgare* L.) with and without Biochar: Tests along a Competition Gradient. *Journal of Agronomy and Crop Science*, 205 (1): 99-107.
13. Glasner C., C. Vieregge, J. Robert, J. Fenselau, **Z. Bitarafan**, C. Andreasen (2019) Evaluation of New Harvesting Methods to Reduce Weeds on Arable Fields and Collect a New Feedstock. *Energies*, 12(9): 1688.
14. **Bitarafan Z.**, J. Rasmussen, J.C. Westergaard, C. Andreasen (2019) Seed yield and lodging assessment in red fescue (*Festuca rubra* L.) sprayed with trinexapac-ethyl. *Agronomy*, 9(10): 617.
15. Jakobsen K., J.A. Jensen, **Z. Bitarafan**, C. Andreasen (2019) Killing Weed Seeds with Exhaust Gas from a Combine Harvester. *Agronomy*, 9(9): 544.
16. **Bitarafan Z.**, F. Liu, C. Andreasen (2019) The Effect of Different Biochars on the Growth and Water Use Efficiency of Fenugreek (*Trigonella foenum-graecum* L.) *Journal of Agronomy and Crop Science*. 206: 169-175.
17. **Bitarafan Z.**, H.R. Asghari, T. Hasanloo, A. Gholami, F. Moradi (2019) Fenugreek (*Trigonella foenum-graecum*) Ecotypes Response to Biochar Application under Deficit Irrigation. *Journal of Agroecology*, 11(2): 403-415.
18. **Bitarafan Z.**, H.R. Asghari, T. Hasanloo, A. Gholami, F. Moradi (2018) Biochar Effect on Seed Trigonelline Content of Fenugreek (*Trigonella foenum-graecum* L.) Ecotypes under Deficit Irrigation. *Iranian Journal of Medicinal and Aromatic Plants*, 34(1): 155-165
19. Andreasen C., **Z. Bitarafan**, J. Fenselau, C. Glasner (2018) Exploiting Waste Heat from Combine Harvesters to Damage Harvested Weed Seeds and Reduce Weed Infestation. *Agriculture*, 8(3): 42.
20. **Bitarafan Z.**, H.R. Asghari, T. Hasanloo, A. Gholami, F. Moradi, B. Khakimov, F. Liu, C. Andreasen (2019) The Effect of Charcoal on Medicinal Compounds of Seeds of Fenugreek (*Trigonella Foenum-Graecum* L.) Exposed to Drought Stress. *Industrial Crops and Products*. 131: 323-329.
21. Tavakoli H., H. Rostami, A. Zabihi, S.G. Hashemi, **Z. Bitarafan** (2014) A Survey of Aflatoxins, Ochratoxin and Zearalenone Contamination in Imported and Iranian Rice in Iran. *Agricultural Engineering Research Journal*, 4(3): 61-64
22. Shirani Rad A.H., **Z. Bitarafan**, F. Rahmani, T. Taherkhani, A. Moradi Aghdam, S. Nasr Esfahani (2014) Effects of Planting Date on Spring Rapeseed (*Brassica napus* L.) Cultivars under Different Irrigation Regimes. *Turkish Journal of Field Crops*, 19(2): 153-157.
23. Shirani Rad A.H., **Z. Bitarafan**, F. Rahmani, T. Taherkhani, A. Moradi Aghdam, S. Nasr Esfahani (2014) Evaluation of Spring Rapeseed (*Brassica napus* L.) Cultivars for Different Planting Dates and Irrigation Regimes. *Journal of Animal and Plant Sciences*, 24(4): 1166-1172.
24. Shirani Rad A.H., **Z. Bitarafan**, A. Dehshiri (2013) Application of Super Absorbent Polymers with Nitrogen Fertilizer in Rapeseed (*Brassica napus* L.) Production under Different Irrigation Regimes. *Indian journal of agricultural research*, 47(3): 220-225.
25. Golzarfar M., A.H. Shirani Rad, B. Delkhosh, **Z. Bitarafan** (2012) Safflower (*Carthamus tinctorius* L.) Response to Different Nitrogen and Phosphorus Fertilizer Rates in Two Planting Seasons. *Žemdirbystė= Agriculture*, 99(2): 159-166.

26. Eskandari Zanjani K., A.H. Shirani Rad, **Z. Bitarafan**, A. Moradi Aghdam, T. Taherkhani, P. Khalili (2012) Physiological Response of Sweet Wormwood to Salt Stress under Salicylic Acid Application and Non Application Conditions. *Life Science Journal*, 9(4): 4190-4195.
27. Karbalaei S., A. Mehraban, H.R. Mobasser, **Z. Bitarafan** (2012) Sowing Date and Transplant Root Size Effects on Transplanted Sugar Beet in Spring Planting. *Annals of Biological Research*, 3(7): 3474-3478.
28. **Bitarafan Z.**, A.H. Shirani Rad (2012) Water Stress Effect on Spring Rapeseed Cultivars Yield and Yield Components in Winter Planting. *International Journal of the Physical Sciences*, 7(19): 2755-2767.
29. **Bitarafan Z.**, A.H. Shirani Rad, B. Delkhosh (2012) Changes in Yield and Morphologic Traits of Spring Safflower as Affected by Nitrogen Rates and Sowing Dates. *Advances in Environmental Biology*, 6(1): 72-78.
30. Delkhosh B., A.H. Shirani Rad, **Z. Bitarafan**, G. Mousavi Nejad (2012) Drought Stress and Sowing Date Effects on Yield and some Grain Traits of Rapeseed Cultivars. *Advances in Environmental Biology*, 6(1): 49-55.
31. **Bitarafan Z.**, A.H. Shirani Rad, B. Delkhosh (2011) Spring Safflower Yield and Yield Components Response to Nitrogen Rates under Different Temperature Regimes. *International Journal of Science and Advanced Technology*, 1(7): 26-31.
32. **Bitarafan Z.**, A.H. Shirani Rad, B. Delkhosh (2011) Nitrogen Rates and Sowing Date Effect on Yield and Oil Content of Spring Safflower. *International Journal of Science and Advanced Technology*, 1(6): 25-30.

Conference Papers and Abstracts

1. Andreasen C., J. Rasmussen, **Z. Bitarafan** (2023) Site-Specific Yield Prediction of Red Fescue (*Festuca rubra* L.). 14th European conference on precision Agriculture, 2-6 July Bologna, Italy
2. **Bitarafan Z.**, V. S. Moen, O. Hetland, I. S. Fløistad (2023) Management of *Lupinus polyphyllus* to Restore the Habitat for *Knautia arvensis*. Workshop of the EWRS Working Group 'Weed Vegetation and Biodiversity', 10-12 May Prague, Czech Republic
3. **Bitarafan Z.**, W. Kaczmarek-Derda, T.W. Berge, L.O. Brandsæter, K.S. Tørresen, I.S. Fløistad (2022) Soil Steaming to Kill Barnyard Grass Seeds in Contaminated Soils. 8th International Weed Science Congress "Weed Science in a Climate of Change", 4-9 December Bangkok, Thailand
4. **Bitarafan Z.**, C. Glasner, C. Andreasen (2022) Killing Weed Seeds in Chaff by Pelletizing Chaff for Further Utilization. 8th International Weed Science Congress "Weed Science in a Climate of Change", 4-9 December Bangkok, Thailand
5. **Bitarafan Z.**, E. Strand, P. Rydahl, K.S. Tørresen (2022) Field Validation of VIPS-weeds Decision Support System for Weed Management in Norway. 8th International Weed Science Congress "Weed Science in a Climate of Change", 4-9 December Bangkok, Thailand
6. **Bitarafan Z.**, W. Kaczmarek-Derda, C.E. Øyri, I.S. Fløistad (2022) Steam Treatment for Sustainable Control of Bohemian Knotweed in Soil Masses. at 12th International Conference on Biological Invasions, 12-16 September Tartu, Estonia
7. **Bitarafan Z.**, W. Kaczmarek-Derda, C. E. Øyri, I. S. Fløistad (2022) Steam Soil Disinfestation to Control *Bromus sterilis* and *Echinochloa crus-galli*, 19th European Weed Research Society Symposium, 20-23 June Athens, Greece
8. **Bitarafan Z.**, Andreasen C. (2022) *Alopecurus myosuroides* Seed Production and Shedding Pattern, 19th European Weed Research Society Symposium, 20-23 June Athens, Greece
9. Andreasen C., **Z. Bitarafan** (2022) The potential for Harvest Weed Seed Control (HWSC) of Common Weed Species in Denmark, 19th European Weed Research Society Symposium, 20-23 June Athens, Greece
10. Hansted L., C. Andreasen, **Z. Bitarafan** (2022) Clopyralid a threat to beekeeping. NBARS Nordic-Baltic apicultural research symposium, 7-8 April 2022
11. **Bitarafan Z.**, C. Glasner, Fenselau J., C. Andreasen (2019) Destroying Weed Seeds with Exhaust Gas from a Combine Harvester, 3rd Global Congress on Plant Biology and Biotechnology, 11-13 March Singapore, Singapore
12. Andreasen C., **Z. Bitarafan**, J.C. Westergaard and J. Rasmussen (2019) Using Drone Imagery to Estimate Lodging in Red Fescue (*Festuca rubra*). EGF-EUCARPIA Joint Symposium. 24-27 June, Zurich, Switzerland
13. Andreasen C., **Z. Bitarafan**, S. Azim and J. Rasmussen (2019) Measuring Height of Grass Crops Using Drone Imagery. EGF-EUCARPIA Joint Symposium. 24-27 June. Zurich, Switzerland.
14. Andreasen C., **Z. Bitarafan** (2019) Seed Shattering of *Bromus Hordeaceus* L. during the Growth Season of Winter Wheat, 3rd Global Congress on Plant Biology and Biotechnology, 11-13 March Singapore, Singapore

15. **Bitarafan Z.**, C. Andreasen (2018) Seed Production and Seed Shattering of Black-grass (*Alopecurus myosuroides*) in Winter Wheat. 18th European Weed Research Society Symposium. 17-21 June Ljubljana, Slovenia
16. Glasner C., C. Andreasen, C. Vieregge, A. Dikiy, J. Fenselau, **Z. Bitarafan**, E. Shumilina (2018) Adaptions of Harvesting Methods and Concepts in order to Reduce Weeds on Agricultural Fields and to Gain Potentially a so far Unexploited Biomass Feedstock. 26th European Biomass Conference and Exhibition. 14-17 May, Copenhagen, Denmark
17. **Bitarafan Z.**, H.R. Asghari, T. Hasanloo, A. Gholami, F. Moradi (2017) The Effect of High Concentration of Biochar on Yield Components of Water Stressed and Irrigated Fenugreek (*Trigonella foenum-graceum*). 18th International Plant Nutrition Colloquium. 21-24 Aug. Copenhagen, Denmark
18. **Bitarafan Z.**, H.R. Asghari, T. Hasanloo, A. Gholami, F. Moradi (2017) Effect of Biochar Application on Yield and Yield Components of Fenugreek Ecotypes under Different Irrigation Regimes. National Conference on Medicinal Plants, 8-9 March Shahrood, Iran (in Persian, English abstract)
19. Khourgami A., M. Rafiee, H. Jafari, **Z. Bitarafan** (2012) Effect of Transplant Preparation Method on Yield and Agronomic Traits of True Potato Seed (TPS) Progenies in Sahneh Region. ICABBBE 2012: International Conference on Agricultural, Biotechnology, Biological and Biosystems Engineering (World Academy of Science, Engineering and Technology 67 2012) July 2012, Zurich, Switzerland

Invited Presentations

1. NIBIO-konferansen 2022, Norge: "Ugras eller kulturplanter- vinneren av klimaendringene"
2. Møte om fellesfinansierte plantevernforsøk med Norsk Plantevernforening (NPLF), Norwegian Agricultural Extension Service (Norsk Landbruksrådgiving- NLR) og NIBIO 2021, Norge: "Resultater fra veiledningsforsøk mot ugras i bygg og vårhvete"
3. DanSeed Symposium 2018, Denmark: "Weed seed shattering during the growing season"

Scientific Popular Articles and News:

1. Slik kan problemmasser gjøres til en ressurs. Bondebladet. Published 24.11.2022.
2. Sprøyting med klopyralid kan gi rester av ugrasmidler i honning- NIBIO News. Published 13.10.2022.
3. Slik kan du begrense spredning av burot- NIBIO News. Published 27.05.2022.
4. Clopyralid i blomsterprodukter fra vinterraps, Tidsskrift for Biavl, Danmarks Biavlerforening. Published 01.2022.

Public Reports:

1. "Biologisk veiledningsprøving 2022. Ugrasmidler"- NIBIO Rapport, 9 (160), 2023, 186 s.
2. "Biologisk veiledningsprøving 2021. Ugrasmidler"- NIBIO Rapport, 8 (108), 2022, 130 s.

Awards:

1. Agriculture 2021-2022 Travel Awards for junior scientists, MDPI, Switzerland, 2021
2. Visiting research scholarship by Science, Research and Technology Ministry of Iran, 2016
3. Visiting research scholarship by Iran's National Elites Foundation, 2016
4. Membership of Iran's National Elites Foundation, 2015 and 2016
5. Top PhD and MSc student (ranked 1 among the peer group)

Referee in International Journals

Agricultural Water Management (Elsevier), Agriculture (MDPI), Agronomy (MDPI)

Memberships of Academies/Scientific Societies

1. European Weed Research Society (EWRS) (2017- present)
2. Agriculture and Natural Resources Engineering Organization of Tehran, Iran (2003-2016)