CURRICULUM VITAE

NAME: Saad L. Hafez Email: shafez@uidaho.edu Fax: 208 722-6708 Office phone: 208-722-6701 ext. 237

Address: 29603 U of I Ln, Parma 83660, Idaho, USA

RANK OR TITLE: Professor of Nematology

DEPARTMENT: Entomology, Plant Pathology and Nematology, University of Idaho

DATE OF FIRST EMPLOYMENT AT UI: January 1982

DATE OF TENURE: July 1, 1992

DATE OF PRESENT RANK OR TITLE: January 1993

EDUCATION BEYOND HIGH SCHOOL:

Degrees:

Ph.D. Entomology - Nematology, 1980, University of California-Davis, Davis, California.

Dissertation Title: Systemic, non-fumigant nematicides and their mode of action for nematode control on grapevine. Under supervision of Dr. R. Raski.

M.Sc. Agricultural Zoology-Nematology, 1972, Cairo University, Cairo, Egypt.

Thesis Title: The relationship of phenolic compounds in nematode resistant and susceptible varieties of soybean and cotton.

B.Sc., (magna cum laude), Plant Protection, 1968, Cairo University, Cairo, Egypt

Certificates and Licenses:

EXPERIENCE:

University of Idaho

Professor of Nematology & Director Nematode Diagnostic Laboratory

July 1999 – Present

United Nations agencies (UNPD and UNIDO)

International expert for Methyl Bromide alternatives

January 1997 – Present

University of Idaho

Associate Professor of Nematology; Nematode Laboratory Director July 1993 – July 1999

Developed simple, more efficient methods for rapid screening and evaluation of alfalfa entries for stem, root-knot and lesion nematodes resistance. Participated in developing three alfalfa varieties resistant to stem and root-knot nematodes (Archer, Lobo and ABI-700) in cooperation with AgriPro Biosciences Inc. Two alfalfa germplasm lines resistant to Columbia root-knot (CRKN-1) and lesion nematode (LN-1) have been released through the Idaho Research Experiment Station.

University of Idaho

Assistant Professor of Nematology: Nematode Diagnostic Laboratory DirectorJuly 1985 – July 1993 Diagnosis of nematode problems; extension program for nematode survey in the potato seed areas. Nematode workshops for statewide potato, sugar beet, alfalfa schools. Nematode control demonstration plots using nematicides, green manure crops, rape meal and oil radish varieties. Participated in IR4 project for Nemacure on onion.

Research Associate and Director 1982 – 1984

Established the first Nematology Program in the State of Idaho, Southwest Idaho Research and Extension Center,

University of Idaho, Parma

Plant Pathology Department, Kansas State University

Post Doc 1980 – 1982

Research on corn and sorghum. Taught college level courses.

University of California-Davis, Davis, CA

Post Doc 1979 – 1980

Worked primarily on chemical control under the supervision of Dr. B. Lear.

Division of Nematology, University of California-Davis, Davis, CA

Graduate Research and Teaching Assistant 1975 – 1978

Cairo University, Cairo, Egypt

Teaching Assistant 1969 – 1975

Taught general zoology, agricultural zoology, acarology, invertebrate pests in agriculture, general nematology, nematicides and nematode control, nematode biology and physiology.

Cairo University, Cairo, Egypt

Research Assistant to Dr. B. Oteifa, Professor of Nematology

Researched control, biochemical changes in plants due to nematode infection (cotton, soybeans), the effects of nematode infection on the nodulation in soybeans and cowpeas, root phenolic contents of resistant and susceptible soybean cultivars infected with reniform nematodes.

1968 - 1969

Cairo University, Cairo, Egypt

Research Assistant to Dr. M. Zaher, Professor of Acarology

Entomology Department, Cairo University, Cairo, Egypt

Teaching and Research Assistant

Researched/instructed insect structure, pesticides, insect control, and economic entomology.

Entomology Department, Cairo University, Cairo, Egypt

Lab and Field Researcher 1967 – 1968

Researched insect and mite control, bioassay testing for new pesticides, screening for new pesticides in the field.

RELATED EXPERIENCE:

Menoufia University, Cairo, Egypt

Honorary Professor June 1995 – Present

University of Idaho Research and Extension Center, Parma, ID

Interim Superintendent July 2002 – July

2003

American Society of Nematology

President 2003 – 2005

Teaching, Extension and Research Appointments: (List position titles and locations since receipt of bachelor's degree)

Academic Administrative Appointments: (List position titles and locations since receipt of bachelor's degree)

Non-Academic Employment including Armed Forces: (List title, brief description, date)

Consulting: (List company/institute name, title, brief description, date)

TEACHING ACCOMPLISHMENTS: (Academic and Extension teaching)

Areas of Specialization:

Courses Taught: (title, course number, date(s))

Students Advised:

Undergraduate Students: (advised to completion of degree, number per year)

Graduate Students:

- 2012 Idris Soliman, MS Plant pathology (Nematology) Nematology Assistantship
- 2016 Mackade Murdock, Master's Degree in Nematology, self-funded
- 2015 Pooria Ensafi, Ph.D. in Nematology, self-funded
- 2015 Christeena Sevy, Ms. S. in Nematology, self-funded

Advised to completion of degree-major professor (student name, degree, and date) Served on graduate committee (student name, degree, and date)

Materials Developed: (non-scholarship activity)

Courses Developed:

Non-credit Classes, Workshops, Seminars, Invited Lectures, etc.:

Honors and Awards:

1. The Idaho Mint Grower Association

Inducts Dr. Saad Hafez into the "The Idaho Mint Hall of Fame."

- 2. NYSA Nampa Beet Growers Appreciation Award 2016.
- 3. Society of Nematologists, 2015

Elected Fellow of the Society of Nematologist

4. Idaho State Horticultural Society

In appreciation for your contributions to the Idaho Fruit Industry and your outstanding presentation.

5. Honor Society of Agriculture, 2014

Award of Merit for Outstanding Service to Agriculture in Idaho

6. University of Idaho, 2014

Gamma Sigma Award of Merit for Outstanding Service to Agriculture in Idaho

- 7. University of Idaho, 2012
 - UI Outstanding Service Award for 30 years of service
- 8. University of Idaho

UI Outstanding Service Award for 25 years of service, 2007

9. Sixth Conference of Applied Zoologists Research Association, India, 2002

Kameshwara Rao Award for the best paper presentation.

- 10. Aventis Award for Outstanding Contribution to Agricultural Service, 2001.
- 11. University of Idaho, 1998

UI Outstanding Service Award for 15 years of service.

12. The State of Idaho

Governor's Award for Excellence in Agriculture, 1996

- 13. Honorary Professor at Menoufia University, 1996
 - Menoufia University, Egypt
- 14. Highest Scientific Award, 1995

Afro-Asian Society of Nematologists

15. Fellow of the Afro-Asian Society of Nematologists, 1994

- 16. Jastro-OShield Research Scholarship, 1977-1978
- 17. Zoology Department, Cairo University, Cairo, Egypt, Cairo, Egypt, 1971-1973 Best Teaching Award

SCHOLARSHIP ACCOMPLISHMENTS: (Including scholarship of teaching and learning, artistic creativity, discovery, and application/integration)

Publications, Exhibitions, Performances, Recitals:

Refereed/Adjudicated: (i.e. books, book chaps., journals, proc., abstr., etc.; provided citations-author, date, title, publisher)

- 1. Skantar, A.M., Handoo, Z.A., Hafez, S. Kantor, M.R., Grabowski, M. and Hult, M.N. (2021). Incidence and molecular diversity of *Cactodera* spp. detected in the United States. Poster presentation presented at the 60th Society of Nematologists Meeting. 12-15 Sept 2021.
- 2. Kantor, M.R., Handoo, Z.A., Skantar, A.M., Hult, M.N., Hafez, S. Kromroy, K., Sigurdson, K. and Grabowski, M. 2021. Morphological and molecular characterization of *Cactodera milleri* Graney & Bird, 1990 from Colorado and Minnesota. Virtual poster presentation at the Virtual SON Conference 2020. December 15-16, 2020.
- 3. Kantor, M. R., Handoo, Z. A, Skantar, A. M, Hult, M. N and Hafez, S. 2019. Morphological and molecular characterization of *Cactodera cacti* from Idaho, USA. Presented at the International Conference on Plant Science Research in Baltimore, MD on March 4-6, 2019.
- 4. Saad L. Hafez. New compounds and chemistries for controlling nematodes. 48th Annual Meeting of the Organization of Nematologists of Tropical America and 55th Annual Meeting of the Society of Nematologists, Montreal, Canada, July 17-22, 2016.
- 5. Saad L. Hafez and P. Sundararaj. Chemical management practices for the management of Meloidogyne chitwoodi on potato in Idaho. USA. Annual Meeting of the Organization of Nematologists of Tropical America and 55th Annual meeting of the Society of Nematologists, Montreal, Canada, July 17-22, 2016.
- 6. Saad L. Hafez and C. Sevy. Lesion nematode and Verticillium wilt interactions in greenhouse mint. 48th Annual Meeting of the Organization of Nematologists of Tropical America and 55th Annual meeting of the Society of Nematologists, Montreal, Canada, July 17-22, 2016.
- 7. D. Kalaiselvi, M. Rajanandhini, P. Sundararaj, S. Hafez, and N. Sundararaj. Promising approach for improving the effect of silver nanoparticle applications in soil for Meloidogyne incognita management: synthesis and application. 48th Annual Meeting of the Organization of Nematologists of Tropical America and 55th Annual meeting of the Society of Nematologists, Montreal, Canada, July 17-22, 2016.
- 8. A. Mohankumar, G. Shanmugam, P. Sundararaj, S. Hafez, and N. Sundararaj. Phloroglucinol (1,3,5-trihydrocybenzene) enhanced the ameliorates stress resistance and reduced β-amyloid toxicity in Caenorhabditis elegans. 48th Annual Meeting of the Organization of Nematologists of Tropical America and 55th Annual meeting of the Society of Nematologists, Montreal, Canada, July 17-22, 2016.
- 9. S. Subramani, S. Govindan, P. Sundararaj, S. Hafez, P. Nagamony, and N. Sundararaj. Evaluation of shielding efficacy of bovine serum albumin and polyethylene amine and graphene oxide by using the nematode model *Caenorhabditis elagans*. 48th Annual Meeting of the Organization of Nematologists of Tropical America and 55th Annual meeting of the Society of Nematologists, Montreal, Canada, July 17-22, 2016.
- 10. Saad L. Hafez and Mahesh P. Pudasaini, 2016. Efficacy of Movento alone or in combinations with other compounds in drip irrigation system for the management of onion nematodes, 2013. Plant Disease management report, Vol. 9
- 11. Saad L. Hafez and Mahesh P. Pudasaini, 2016. Effect of Movento alone or in combinations with Vydate or Vapam for control of Columbia root-knot nematode in Potato, 2012. Plant Disease management report, Vol. 9
- 12. Saad L. Hafez and Mahesh P. Pudasaini, 2016. Optimum timing of Movento application for control of Columbia root-knot nematode in Potato, 2010. Plant Disease management report, Vol. 9
- 13. Saad L. Hafez and P. Sundararaj. 2016. Efficacy of Telone II for the control of Columbia root-knot nematode on potato, 2010. Plant Disease Management report. Vol 9.
- 14. Sundararaj, P. and S. L. Hafez. 2016. Effect of chemical nematicides on the management of Columbian root knot nematode Meloidogyne chitwoodi on potato. Presented in the AZRA Silver Jubilee International

- Conference "Probing Biosciences for Food Security & Environmental Safety" on 16-18 February 2014, held at CRRI, Cuttack, India.
- 15. P. Sundararaj, P. and Saad L. Hafez. Efficacy of Chemical nematicides for the management of lesion nematodes Pratylenchus neglectus and Pratylenchus thornei on potato in Idaho, USA.
- 16. Saad L. Hafez and P. Sundararaj. Efficacy of fumigant and non-fumigant nematicides for the management of Meloidogyne chitwoodi in potato. Indian Nematology Conference, India, 2016.
- 17. Hafez, S.L. and P. Sundararaj. 2015. Effect of Movento alone or in combinations with Vydate and Vapam on Columbia root-knot nematode and potato yield, 2011. Plant Disease Management Reports.9: N021.
- 18. Hafez, S.L. and P. Sundararaj. 2015. Effect of different chemicals for the management of Columbia root-knot nematode on potato, 2011. Plant Disease Management Reports. 9: N022.
- 19. Hafez, S.L. and P. Sundararaj. 2015. Effect of different chemicals for the management of Columbia root-knot nematode on potato, 2011. Plant Disease Management Reports. 9: N023.
- 20. Hafez, S.L. and P. Sundararaj. 2015. Effect of MCW on Columbia root-knot nematode and potato yield, 2011. Plant Disease Management Reports. 9: N024.
- 21. Hafez, S.L. and P. Sundararaj. 2015. Effect of MCW-2 on Columbia root-knot nematode and potato yield, 2011. Plant Disease Management Reports. 9: N025.
- 22. Hafez, S.L. and P. Sundararaj. 2015. Effect of MCW-2 formulations at different rates on potato and root lesion nematode under greenhouse conditions, 2011. Plant Disease Management Reports. 9: N026.
- 23. Hafez, S.L. and P. Sundararaj. 2015. Effect of MCW-2 alone or in combination with Vydate on Tobacco rattle virus and potato yield, 2011. Plant Disease Management Reports. 9: N027.
- 24. Hafez, S.L. and P. Sundararaj. 2015. Evaluation of new chemicals for the management of Columbia root-knot nematode on potato, 2010. Plant Disease Management Reports. 9: N028.
- 25. Hafez, S.L. and P. Sundararaj. 2015. Effect of Vapam alone or with Adsorb on Columbia root-knot nematode and potato yield, 2011. Plant Disease Management Reports. 9: N029.
- 26. Efficacy of Telone II for the control of Columbia root-knot nematode on potato, 2010.
- 27. Effect of Fosthiazate at different rates for the management of Columbia root-knot nematode on potato, 2010.
- 28. Optimum timing of Movento application for control of Columbia root-knot nematode in Potato, 2010.

BOOKS:

- 1. Saad, L. Hafez and Sanduraraj Palanisamy (2021). Integrated nematode management of root-knot nematode and root lesion nematodes in Idaho potatoes: Major economic limiting factors. In Sikora, R., Desaeger, J., and Molendijk, L. (Eds). *Integrated nematode management state of the art and visions for the future*. CABI.
- 2. Saad L. Hafez, Sundararaj Palanisamy and Ann E. MacGuidwin. Nematode management In: Potato production systems (2020), Springer, ISBN: <u>978-3-030-39157-7</u> 10.
- 3. Plant Parasitic Nematodes and their Economic Relevance in Utah and Nevada, Chapter 4. Plant Parasitic Nematodes in Sustainable Agriculture of North America, Sustainability in Plant and Crop Protection.
- 4. Nematode Management, Chapter 11. Potato Production Systems.
- 5. Hafez, S. L. and M. K. Thornton, 1996. Cultural management guide of green manure crops, 20 pages.
- 6. Contributed to the Irrigated Spring Wheat Production Guide for Southern Idaho, K. D. Kephart, 1989.
- 7. Contributed to the Compendium of Wheat Diseases, Second Edition, M. V. Wiese, 1987. "Diseases caused by Nematodes." P. 58-65.
- 8. Contributed to the IPM Manual for potatoes in the Western U.S. 1986. "Nematodes." P. 108-116.

PEER REVIEWED/EVALUATED: (i.e. journals, articles, proceedings, abstracts, etc.)

- 1. Skantar, A.M., Handoo, Z.A., Kantor, M.R., Hult, M.H., Hafez, S.L., Kromroy, K., Sigurdson, K. and Grabowski, M. (2021). First report of Cactodera milleri Graney & Bird, 1990 from Colorado and Minnesota. Journal of Nematology 52:1-17.
- 2. Handoo, Z.A., Skantar, A.M, Kantor, M.R., Hafez, S.L., and Hult, M.N. (2020). Molecular and morphological characterization of the amaryllis lesion nematode, *Pratylenchus hippeastri* (Inserra et al., 2007), from California. Journal of Nematology 52, 2020-058.
- 3. Zafar A. Handoo, Andrea M. Skantar, Saad L. Hafez, Mihail R. Kantor, Maria N. Hult, Stephen A. Rogers (2020). Molecular and morphological characterization of alfalfa cyst nematode, Heterodera medicaginis from Utah. Journal of Nematology, 52: 1-4.

- 4. Inga A. Zasada, Megan Kitner, Catherine Wram, Nadine Wade, Rusell E. Ingham, Saad Hafez, Hassan Mojtahedi, Sam Chavoshi, and Nancy Hammack (2019). Trends in occurrence, distribution, and population densities of plant-parasitic nematodes in the Pacific Northwest of the United States from 2012 to 2016. Plant health progress 20 (1):20-28.
- 5. Powers, T., Skantar, A., Harris, T., Higgins, R., Mullin, P., Hafez, S., Handoo, Z. A., Todd, T., and Powers, K. 2019 DNA barcoding evidence for the North American presence of alfalfa cyst nematode, *Heterodera medicaginis*. Journal of Nematology. 51(1):1-17
- 6. Skantar, A. M., Handoo, Z. A., Kantor, M., Hult, M. N. and Hafez, S., 2019. First report of the cactus cyst nematode, *Cactodera cacti*, from a cactus garden in Idaho. Journal of Nematology. 44(51):3-6.
- 7. Nematicidal activity of green synthesized silver nanoparticles using plant extracts against root-knot nematode *Meloidogyne incognita*. D. Kalaiselvi, P. Sundararaj, P. Premasudha and Saad L. Hafez. Int. J. of Nem. Vol 27. No. 182 Page 81-94.
- 8. Compatibility and viability of newly isolated entomopathogenic nematodes (Steinernema siamkayai and Heterorhabditis bacteriophora) with commercial insecticides A. Mohankumar, G. Shanmugam, D. Kalaiselvi, S. L. Hafez and P. Sundararaj. Int. J. of Nem. Vol. 27. No. 122 Page 12-16.
- 9. Saad L. Hafez and Mahesh P. Pudasaini, 2015. Efficacy of Movento alone or in combinations with other compounds in drip irrigation system for the management of onion nematodes, 2013. Plant Disease Management report, Vol. 9 (Submitted).
- 10. Saad L. Hafez and Mahesh P. Pudasaini, 2015. Effect of Movento alone or in combinations with Vydate or Vapam for control of Columbia root-knot nematode in potato, 2012. Plant Disease Management report, Vol. 9 (Submitted).
- 11. Saad L. Hafez and Mahesh P. Pudasaini, 2015. Optimum timing of Movento application for control of Columbia root-knot nematode in potato, 2010. Plant Disease Management report, Vol. 9 (Submitted).
- 12. P. Sundararaj and Saad L. Hafez. Efficacy of chemical nematicides for the management of lesion nematodes Pratylenchus neglectus and Pratylenchus thornei on potato in Idaho, USA. Indian Nematology Conference, India, 2014.
- 13. Saad L. Hafez and P. Sundararaj. Efficacy of fumigant and non-fumigant nematicides for the management of *Meloidogyne chitwoodi* in potato. Indian Nematology Conference, India, 2014.
- 14. P. Sundararaj, T. Kathiresan, and Saad L. Hafez. Effect of Pratylenchus zeae on B-1, 3-Glucanase and chitinase activities in resistant and susceptible sugarcane clones. Indian Nematology Conference, India 2014.
- 15. Saad L. Hafez, Mahesh P. Pudasaini and Ransey Portenier. Scope of new nematicides and numbered compounds for Columbia root-knot nematode management in Idaho. 6th International Congress of Nematology, Cape Town, South Africa. May 4-9, 2014.
- 16. Saad L. Hafez, Mahesh P. Pudasaini and Ransey Portenier. Interaction of lesion nematodes and fungus (Verticillium dahlia) in mint. 6th International Congress of Nematology, Cape Town, South Africa. May 4-9, 2014.
- 17. Saad L. Hafez, Mahesh P. Pudasaini and Ransey Portenier. Use of tolerant varieties, reduced rate of Telone II, and combination of both for sugar beet cyst nematode management in Idaho. 6th International Congress of Nematology, Cape Town, South Africa. May 4-9, 2014.
- 18. Kalaiselvi, D., P. Sundararaj and Saad L. Hafez. Ecotoxicity of silver nanoparticles synthesized from Azadirachta indica and Curcuma longa on root-knot nematode *Meloidogyne incognita*. 6th International Congress of Nematology, Cape Town, South Africa. May 4-9, 2014.
- 19. Mohankumar, A., P. Sundararaj and Saad L. Hafez. Compatibility and viability of entomopathogenic nematodes Steinernema and Heterorhabditis species at different concentrations of pesticides under laboratory conditions. 6th International Congress of Nematology, Cape Town, South Africa, May 4-9, 2014.
- Saranya, C., P. Sundararaj and Saad L. Hafez. Spatial Distribution of Potato Cyst Nematodes in the Nilgiris Hills of South India, India. 6th International Congress of Nematology, Cape Town, South Africa. May 4-9, 2014.
- 21. Garo T. Haroutunian and Saad L. Hafez, 2012. Efficiency of Oil Radish and Arugula, with and without Plastic Tarp in the Control of Meloidogyne incognita. International Journal of Nematology. In press.
- 22. Hafez, S.L., P. Sundararaj and Z. Handoo, 2010. Occurrence and distribution of nematodes in Idaho crops. International Journal of Nematology 20:59-66.
- 23. Hafez, S. L. and P. Sundararaj, 2010. Chemical and nonchemical strategies for the management of Meloidogyne chitwoodi on potato in Idaho, USA. International Journal of Nematology 20:85-95.
- 24. Hafez, S. L. and P. Sundararaj, 2009. Chemical management practices of Meloidogyne chitwoodi in a potato field in USA. International Journal of Nematology 19:2, 203-207.

- 25. Pang, W., S. L. Hafez, P. Sundararaj and B. Shafii, 2009. Pathogenicity of *Pratylenchus penetrans* on onion. Nematropica 39:35-46.
- 26. Hafez, S. L. and P. Sundararaj, 2009. Evaluation of suppressive effect of trap crops on Heterodera schachtii and Meloidogyne chitwoodi under greenhouse conditions. Nematologia Mediterranean 37:245-248.
- 27. Pang, W., S. L. Hafez, and P. Sundararaj, 2009. Pathogenicity of *Meloidogyne hapla* on onion. Nematropica 38:207-216.
- 28. Hafez, S. L. and P. Sundararaj, 2009. Chemical management of the root-lesion nematode, Pratylenchus neglectus in two Idaho potato fields. Nematologia Mediterranean 37:241-244.
- 29. Pang, W., S. L. Hafez, and P. Sundararaj, 2009. Concomitant interaction of Pratylenchus penetrans and Meloidogyne hapla on onion. Nematropica 38:279-286.
- 30. Pang, W., S. L. Hafez, and P. Sundararaj, 2009. Screening of onion cultivars for resistance and tolerance to Pratylenchus penetrans and Meloidogyne hapla. Nematropica 39:47-56.
- 31. Fallahi, E., S. L. Hafez, M. Colt and M. M. Seyed Bagheri, 1998. Effects of metam sodium and rootstock on parasitic nematodes, tree growth, yield fruit quality, and leaf mineral nutrients in 'Braeburn' apple. Accepted for publication in the December 1998 issue of Nematropica.
- 32. Al-Rehiayani, S. and S. L. Hafez, 1998. Host status and green manure effect of selected crops on Meloidogyne chitwoodi race 2 and Pratylenchus neglectus. Accepted for publication in the December 1998 issue of Nematropica.
- 33. Davis, J. R., D. C. Husman, D. T. Westermann, S. L. Hafez, et al, 1996. Effect of green manures on Verticillium wilt of potato. Phytopathology Vol 86, No. 5:444-453.
- 34. Hafez, S. L., A. M. Golden, F. Rashid and Z. Hondoo. 1992 Distribution of plant parasitic nematodes associated with crops in Idaho and Eastern Oregon. Nematropica Journal of Nematology 22:193-204.
- 35. Davis, J. R., S. L. Hafez and L.H. Sorenson, 1992. Comparisons of potato clones with differential resistance to Verticillium dahlia and Pratylenchus spp. American Potato Journal 69:371-383.
- 36. McSorley, R., S. L. Hafez, et al, 1987. Bibliography of estimated crop loss in the United States due to plant parasitic nematodes. Ann. of Appl. Nematology 1:6-12.
- 37. Hafez, S. L., and K. Hara, 1986. The effect of Vapam on Columbia root-knot nematode Meloidogyne chitwoodi. American Potato Journal 63:428-429.
- 38. Hafez, S. L., and A. M. Golden, 1985. First report of oat cyst nematode Heterodera avenae on barley Eastern Idaho. Plant Disease 69(4):360.
- 39. Hafez, S. L., D. J. Raski, and B. F. Lownsbery, 1981. Effects of Paratrichodorus christiei (Allen) Siddiqi on Thompson seedless grapevine. Revue de Nematologie4(1):115-120.
- 40. Raski, D. J., and S. L. Hafez, et at, 1981. Non-fumigant nematicides tested against plant parasitic nematodes in established vineyards. California Agr. Vol. 35(5&6):10-12.
- 41. Hafez, S. L., and D. J. Raski, 1981. Residue dynamics and persistence of aldicarb and its biologically similar active metabolites in grapevines. J. Nematology 13:29-36.
- 42. Hafez, S. L., D. J. Raski, and B. Lear, 1981. Action of systemic nematicides in control of Xiphinema index on grapes. J. Nematology 13:24-29.
- 43. Hafez, S. L., and M. A. El-Sherif, 1974. Root phenolic contents of resistant and susceptible soybean cultivars infected with Rotylenchulus reniformis. Annals of Agricultural Science, Moshtohor 1:245-250 (Egypt).
- 44. Hafez, S. L., M. H. Balba, and M. A. El-Sherif, 1973. The nematicidal action of aldicarb in relation to the phenolic constituent of cotton. College of Agriculture Bulletin. Cairo University, Giza, Egypt, 23:84-88.
- 45. Hafez, S. L., M. A. El-Sherif, and B. A. Oteifa, 1973. Effect of Rotylenchulus reniformis infection on the phenolic contents of cotton. Nematologia Mediterranean 1(2):111-114.

ABSTRACTS:

- 1. The use of new Chemistries for Potato Nematode Management Programs in Idaho, USA. Luff, Kelly and S. L. Hafez. Society of Nematology 2019 in South Carolina.
- 2. Molecular and Morphological Evidence for the presence of Alfalfa Cyst Nematode, Heterodera medicaginis, in the United States. Skantar, Andrea M., T. Powers, S. Hafez, Z. Handoo, T. Harris, R. Higgins, P. Mullins, T. Todd, and K. Powers. Society of Nematology 2019 South Carolina.
- 3. Management of Heterodera schachtii with spirotetramat in Snake River plain sugar beet production. Hafez, S. L., and K. Luff. Society of Nematology 2019 in South Carolina.
- 4. Management of nematode and Verticillium wilt in mint grown in Eastern Oregon and Idaho. Hafez, S. L., and M. Murdock. Society of Nematology 2019 South Carolina.
- 5. Hafez, S. L., M. P. Pudasaini, K. Luff, and R. Portenier. 2012. Effect of different chemical seed treatments

- on sugar beet cyst nematode. Journal of Nematology 43.
- 6. Hafez, S. L., M. P. Pudasaini, K. Luff, C. Schiller, and R. Portenier. 2012. Chemical management of root lesion nematode (Pratylenchus thornei) in onion. Journal of Nematology 43.
- 7. Hafez, S. L., M. P. Pudasaini, C. Schiller, and R. Portenier. 2012. Effect of MCW-2 on potato yield and nematode associated with potato in Idaho. Journal of Nematology 43.
- 8. Luff, Kelly, S. L. Hafez, M. P. Pudasaini, and R. Portenier. 2012. Effect of Movento on Columbia root-knot nematode and potato yield. Journal of Nematology 43.
- 9. Hafez, S. L. and K. Luff. 2011. The effect of rate, timing and application method of various insecticides for the management of *Heterodera schachtii*. Journal of Nematology, 43:3-4, 251.
- 10. Hafez, S. L. and K. Luff. 2011. Efficacy and optimal timing of Movento for control of Columbia root-knot nematode on potato. Journal of Nematology, 43:3-4, 252.
- 11. Hafez, S.L., P. Sundararaj, and Z. A. Handoo. 2010. Distribution of Nematodes in Idaho Crops. Presented at the "49th Annual Meeting of the Society of Nematologists" held at Boise, Idaho, USA from July 14-20, 2010. Abstract published in the Journal of Nematology 42:3, 2010. p. 245.
- 12. Hafez, S.L., P. Sundararaj, and R. Portenier. 2010. Efficacy of Movento Compared with other Nematicides for the Control of Pratylenchus thornei and *Meloidogyne Chitwoodi* on Potato. Presented at the "49th Annual Meeting of the Society of Nematologists" held at Boise, Idaho, USA from July 14-20, 2010. Abstract published in the Journal of Nematology 42:3, 2010. p. 245.
- 13. Hafez, S.L., P. Sundararaj, and R. Portenier. 2010. Efficacy of Nematicides in the Management of Meloidogyne Chitwoodi on Potato. Presented at the "49th Annual Meeting of the Society of Nematologists" held at Boise, Idaho, USA from July 14-20, 2010. Abstract published in the Journal of Nematology 42:3, 2010. p. 246.
- 14. Hafez, S.L., P. Sundararaj, and R. Portenier. 2010. Evaluation of Fumigant and Non-fumigant nematicides in the management of *Meloidogyne chitwoodi* on potato. Presented at the "49th Annual Meeting of the Society of Nematologists" held at Boise, Idaho, USA from July 14-20, 2010. Abstract published in the Journal of Nematology 42:3, 2010. p. 246.
- 15. Hafez, S. L., M. P. Pudasaini, K. Luff, and R. Portenier. 2012. Effect of different chemical seed treatments on sugar beet cyst nematode. Journal of Nematology 43.
- 16. Hafez, S. L., M. P. Pudasaini, K. Luff, C. Schiller, and R. Portenier. 2012. Chemical management of root lesion nematode (*Pratylenchus thornei*) in onion. Journal of Nematology 43.
- 17. Hafez, S. L., M. P. Pudasaini, C. Schiller, and R. Portenier. 2012. Effect of MCW-2 on potato yield and nematode associated with potato in Idaho. Journal of Nematology 43.
- 18. Luff, Kelly, S. L. Hafez, M. P. Pudasaini, and R. Portenier. 2012. Effect of Movento on Columbia root-knot nematode and potato yield. Journal of Nematology 43.
- 19. Hafez, S. L. and K. Luff. 2011. The effect of rate, timing and application method of various insecticides for the management of *Heterodera schachtii*. Journal of Nematology, 43:3-4, 251.
- 20. Hafez, S. L. and K. Luff. 2011. Efficacy and optimal timing of Movento for control of Columbia root-knot nematode on potato. Journal of Nematology, 43:3-4, 252.
- 21. Hafez, S.L., P. Sundararaj, and Z. A. Handoo. 2010. Distribution of Nematodes in Idaho Crops. Presented at the "49th Annual Meeting of the Society of Nematologists" held at Boise, Idaho, USA from July 14-20, 2010. Abstract published in the Journal of Nematology 42:3, 2010. p. 245.
- 22. Hafez, S.L., P. Sundararaj, and R. Portenier. 2010. Efficacy of Movento Compared with other Nematicides for the Control of Pratylenchus thornei and Meloidogyne Chitwoodi on Potato. Presented at the "49th Annual Meeting of the Society of Nematologists" held at Boise, Idaho, USA from July 14-20, 2010. Abstract published in the Journal of Nematology 42:3, 2010. p. 245.
- 23. Hafez, S.L., P. Sundararaj, and R. Portenier. 2010. Efficacy of Nematicides in the Management of Meloidogyne Chitwoodi on Potato. Presented at the "49th Annual Meeting of the Society of Nematologists" held at Boise, Idaho, USA from July 14-20, 2010. Abstract published in the Journal of Nematology 42:3, 2010. p. 246.
- 24. Hafez, S.L., P. Sundararaj, and R. Portenier. 2010. Evaluation of Fumigant and Non-fumigant nematicides in the management of Meloidogyne chitwoodi on potato. Presented at the "49th Annual Meeting of the Society of Nematologists" held at Boise, Idaho, USA from July 14-20, 2010. Abstract published in the Journal of Nematology 42:3, 2010. p. 246.
- 25. Al-Rehiayani, S., and S. Hafez. 1998. Host status and green manure effect of selected crops on Meloidogyne chitwoodi race 2 and Pratylenchus neglectus. Nematropica. In press.
- 26. Al-Rehiayani, S., and S. Hafez. 1998. Oil radish and rapeseed green manure crops for Columbia root-knot

- and lesion nematode management on potato. Journal of Nematology. (Abstract). In press.
- 27. Al-Rehiayani, S., and S. Hafez. 1998. Relation of two populations of Pratylenchus neglectus to potato and Verticillium dahliae. Phytopathology. (Abstract). In press.
- 28. Al-Rehiayani, S., and S. L. Hafez. 1997. Effect of green manure crops on yield of potatoes grown in nematode-infested soil. Journal of Nematology 29:567.
- 29. Hafez, S., and R. Rynk. 1997. The effect of composting sugar beet tare dirt on viability of sugar beet cyst nematode. Journal of Nematology 29:581.
- 30. Al-Rehiayani, S., and S. L. Hafez. 1996. Green manure crops with potential for management of Columbia root-knot nematode, Meloidogyne chitwoodi, race 2. Nematropica 27:235.
- 31. Hafez, S. L., G. C. Weiser, P. A. Grau, and P. Warrior. 1996. Efficacy of two formulations of ABG-9008, A biological nematicide, on sugar beets grown in soil infested with Heterodera schachtii. Nematropica 26:270.
- 32. Hafez, S. L., M. Thornton, S. Al-Rehiayani, and G. C. Weiser. 1996. Green manure and N fertilizer effects on potato tuber yield nematode infested soil. American Potato Journal 73:359.
- 33. Soliman, A., S. Hafez and M. Thornton. 1995. Host status of selected crops to Meloidogyne chitwoodi and Pratylenchus neglectus. Amer Potato J 72:658.
- 34. Hafez, S. L., K. Hara, and R. Portenier. 1995. The effect of oil radish and white mustard trap crops on sugarbeet cyst nematode soil populations and subsequent sugarbeet crop yield. Nematropica 25(2):89.
- 35. Al-Rehiayani, S., S. L. Hafez and M. Thornton. 1995. The effect of selected crops on the population dynamic of M. chitwoodi and P. neglectus. Nematropica 25(2):79.
- 36. Hafez, S. L., R. F. Rynk, K. Hara and M. Seyed Bagheri. 1995. The effect of composting sugar beet tare dirt, cow manure and cull onions on the viability of sugar beet cyst nematode. American Society of Sugar beet Technologists. March 8-11, 1995. New Orleans, LA. Journal of Sugar Beet Res. 32(2 & 3):141.
- 37. Hafez, S. L., Kikuye Hara. 1995. The impact of green manure crops growing in sugar beet rotation on sugar beet cyst nematode population and sugar beet yield. Journal of Sugar Beet Res. 32(2 & 3):141.
- 38. Hafez, S. L. 1994. Potato nematode management in the Pacific Northwest of the United States. Afro-Asian Society of Nematologist 2nd Symposium, Egypt. Dec 17-20, 1994.
- 39. Hafez, S. L., K. Hara, and M. Seyed Bagheri. 1994. The effect of composting sugar beet tare dirt, cow manure and cull onions on the viability of sugar beet cyst nematode. Afro-Asian Society of Nematologists 2nd Symposium, Egypt. Dec 17-20, 1994.
- 40. Hafez, S. L. 1994. The use of green manure crops in sugar beet rotation for sugar beet cyst nematode management. Journal of Nematology, Vol. 26(4):548.
- 41. Hafez, S. L. and E. Fallahi. 1994. Comprehensive survey of nematode populations and horticultural performance of 'Rome Beauty' apple orchard in Idaho. Journal of Nematology, Vol. 26(4):548.
- 42. Hafez, S. L., F. Rashid and K. Hara. 1993. The effect of composting sugar beet tare dirt and cull onions on the viability of sugar beet cyst nematode. Nematropica. Vol. 23, No. 2.
- 43. Hafez, S. L., M. Seyed Bagheri, F. Rashid and K. Hara. 1993. The role of sugar beet tare dirt in the spread of plant parasitic nematodes. Nematropica. Vol. 23, No. 2.
- 44. Hafez, S. L. 1993. Management of nematode problems relative to potato production in the PNW of the USA. Nematropica. Vol. 23, No. 2.
- 45. Hafez, S. L., K. Hara, F. Rashid, D. Searle and D. Bowers. 1993. Sugar beet cyst nematode population response to fall or spring planting of nematode resistant oil radish and yellow mustard varieties. Journal of Sugar beet Research, Vol. 3, No. 1 & 2, p 96.
- 46. Hafez, S. L., K. Hara, F. Rashid and D. Bowers. 1993. The effect of sugar beet tare dirt composting process on the viability of sugar beet cyst nematode. Journal of Sugar beet Research, Vol. 3, No. 1 & 2, p 96.
- 47. Hafez, S. L., F. Rashid and K. Hara. 1993. Seasonal decline of sugar beet cyst nematode juvenile and egg populations in Idaho. Journal of Sugar beet Research, Vol. 3 No. 182, p 96.
- 48. Hafez, S. L., F. Rashid and K. Hara. 1992. Seasonal decline of sugar beet cyst juvenile and egg populations in Idaho. Journal of Nematology 24(4):595.
- 49. Hafez, S. L., F. Rashid, and K. Hara. 1992. The effect of sugar beet tare dirt composting process on the viability of sugar beet cyst nematode. Journal of Nematology 24(4):594-595. American Potato Journal (68):638.
- 50. Hafez, S. L. 1992. Utilizing nematode resistant catch crops or sugar beet cultivars for sugar beet cyst nematode (Heterodera schachtii) management. Nematropica 22(2):127.
- 51. Thornton, M., and S. Hafez. 1991. Green manure rapeseed, rapeseed meal and chitin amendments from shellfish for Columbia root-knot nematode control.

- 52. Mohan, S. K., S. L. Hafez, E. Fallahi, and W. Colt. 1991. Influence of soil fumigation and fungicides on growth, yield and leaf minerals of apples replanted on old orchard sites. Hort. Science 26(6):168.
- 53. Hafez, S. L. and D. R. Miller. 1990. The effect of Pratylenchus penetrans on different alfalfa cultivars. 32nd North American Alfalfa Improvement Conference. Aug. 19-24, 1990, Pasco, Washington. pp. 18.
- 54. Hafez, S. L., D. Miller and K. Hara. 1988. The effect of different soil enhancer materials on different alfalfa varieties growing in root-knot nematode infested soil. (Abstract) NAAIC Conference, 1988.
- 55. Hafez, S. L. 1988. The oat cyst nematode in the Northwestern States. International Cyst Nematode Workshop. South Carolina, 1988.
- 56. Hafez, S. L. and K. Hara. 1988. Heterodera schachtii populations can be reduced by planting a trap crop or applying low rates of Temik to rotation crops. J. of Sugar beet Research 26, No. 1, p. A10.
- 57. Hafez, S. L., and K. W. Dorschner. 1989. The effect of Heterodera humuli Filipjev on hops, Humulus lupulus cv. Cascade. J. of Nematology 20:638.
- 58. Hafez, S. L. and K. Hara. 1987. Reduction of Heterodera schachtii populations by trap cropping or application of low rates of Temik to rotation crops. XIX Annual OTAN/ONTA Meeting, October 18-23, Santiago, Chile.
- 59. Hafez, S. L., and Don Miller. 1986. The effect of stem and northern root-knot nematodes on different alfalfa varieties. 30th North American Alfalfa Improvement Conference, July 27-31, St. Paul, Minnesota. pp. 10.
- 60. Hafez, S. L., and K. Hara. 1986. The effect of Vapam injections on Meloidogyne chitwoodi in potatoes. J. Nematology 18(4):612.
- 61. Davis, J. R., S. L. Hafez, and L. Sorenson. 1986. The Butte potato cultivar: A tool for interpreting field interactions between Verticillium dahliae and Pratylenchus neglectus. Phytopath. 76:842.
- 62. Davis, J. R., H. R. Azad, and S. L. Hafez. 1986. Interactions between potato genotypes, and rhizosphere organisms and the potential for the biological control of Verticillium. International Verticillium Symposium, Guelph, Canada.
- 63. Hafez, S. L., and Don Miller. 1986. Optimum inoculum levels and conditions for screening alfalfa for resistance to Ditylenchus dipsaci and Meloidogyne hapla. J. of Nematology 18:612.
- 64. Hafez, S. L. 1985. Evaluation procedures for alfalfa stem and root-knot nematode resistance. Proceedings Western Alfalfa Improvement Conference, September 9-11, Logan, Utah. pp. 4-5.
- 65. Hafez, S. L., and G. Beaver. 1985. Control of plant parasitic nematodes on potatoes in Idaho. American Potato Journal 62:428.
- 66. Hafez, S. L. 1985. Optimum inoculum levels and conditions for evaluating resistance in alfalfa to stem and root-knot nematode. Proceedings of the 19th Central Alfalfa Improvement Conference, Oklahoma City, April. pp 38-39.
- 67. Davis, J. R., J. J. Pavek, D. L. Corsini, L. H. Sorensen, and S. L. Hafez. 1984. Evaluation of field resistance to Verticillium dahliae among potato clones and relationships of potato clones to the soil environment. EAPR Conference, Interlaken, Switzerland, July 1-6, pp. 237-238.
- 68. Davis, J. R., S. L. Hafez, D. L. Corsini, and J. J. Pavek. 1983. Reductions of Pratylenchus neglectus with the cropping of "Butte" potato and relationships with Verticillium wilt. J. Nematology 15(4):477.
- 69. Hafez, S. L., and J. J. Gallian. 1983. Sugar beet cyst nematode control with combinations of systemic nematicide-insecticides. J. Nematology 15(4):480.
- 70. Claflin, L. E., S. L. Hafez, and T. L. Todd. 1983. Effects of insecticide-nematicides on stunt nematode population and grain sorghum yields. The 4th International Congress of Plant Pathology, Melbourne, Australia, August 17-24, 1983.
- 71. Davis, J. R., L. H. Sorenson, D. L. Corsini, and S. L. Hafez. 1983. Effects of continuous cropping with potato genotypes on Verticillium dahliae and Pratylenchus neglectus. Phytopathology 73:958.

OTHER: (reports, proceedings, papers, citations and references, performances)

- 1. Hafez, S.L. and P. Sundararaj. 2010. Alternative methods for root-knot nematode management for 2010 season. Spudvine. February 2010.
- 2. Hafez, S.L. and P. Sundararaj. 2009. Soil fumigation A tool for sugar beet cyst nematode management. University of Idaho, CIS 1163.
- 3. Hafez, S.L. and P. Sundararaj. 2009. Management of corky ringspot disease of potatoes in the Pacific Northwest. University of Idaho, CIS 1162.
- 4. Hafez, S.L. and P. Sundararaj. 2009. Management of corky ringspot disease of potatoes in the Pacific Northwest. CIS. University of Idaho, CIS publication No.1162.
- 5. Hafez, S.L. and P. Sundararaj. 2009. Soil fumigation A tool for sugar beet cyst nematode management.

- University of Idaho, CIS publication No.1163.
- 6. Araji, A. A. and S. L. Hafez. 2001. The economic and environmental impacts of investment in agricultural biotechnology research. A.E. Research series No. 01-04.
- 7. Araji, A. A. and S. L. Hafez. 2000. The economic and environmental impacts of nematode biocontrol method. A.E. Research series No. 00-02.
- 8. Hafez S. L. 1999. Sugar Beet nematodes in Idaho and Eastern region. CIS 1072.
- 9. David Granatstein, Rynk R. and Hafez, S.L. 1999. Composting sugar beet tare dirt to control nematodes. The Compost Connection for Western Agriculture. No. 9, April 1999.
- 10. Hafez S. L. 1998. Alfalfa nematodes in Idaho. Bulletin 805.
- 11. Hafez S. L. 1998. Management of sugar beet nematodes. CIS 1071.
- 12. Hafez S. L. 1998. Common sugar beet nematodes in Idaho and Eastern region. CIS. 1072.
- 13. Seyed Bagheri, Mir-M, S.L. Hafez, and Robert Rynk. 1998. Composting in Commercial Agriculture. CIS 1073.
- 14. Hafez, S. L. 1996. Early fall is the time to sample for nematode. Spudvine, July 1996.
- 15. Thornton, M., and S. L. Hafez. 1996. Management of green manure crops. Slide Set Published as part of PNW Sustainable Agricultural Systems In-Service Education Program.

DISCOVERIES:

- 1. Alfalfa Syst Nematode, Heterodera medicaginis
 - a. First discovery of this nematode in the USA, 2019.
- 2. Cactodera Cacti
 - a. First discovery of this nematode in Idaho, 2019.
- 3. Cactodera Cacti
 - a. First discovery of this nematode in Colorado, 2019.
- 4. Alfalfa cyst nematode, Heterodera medicaginis
 - a. First discovery of this nematode in Utah, 2019.
- 5. Cactodera Milleri
 - a. First discovery of this nematode in Colorado, 2019.
- 6. Discovered new species of nematode. First report in USA, 2016.
- 7. Potato pale cyst nematode (*Globodera pallida*) in Idaho, 2006.
 - a. First discovery of this nematode in the United States.
- 8. New needle nematode species (Longidorus saadi) from Idaho, 2006.
 - a. Newly discovered species, named after Dr. Saad L. Hafez.

Papers presented at National and International Scholarly Meetings or as Invited Speaker.

- 1. Methyl Bromide Alternatives, Santiago, October 3, 2003, Invited.
- 2. Alternatives to Methyl Bromide for Apple Replant in Idaho. January 21-25, 1999. ONTA Meeting in San Juan Puerto Rico. Invited.
- 3. Nematode Workshop at the American University in Beirute, Lebanon. May 1999. Invited.
- 4. Alternative to Methyl Bromide for Indonesia, Jakarta, Indonesia. July 1998. Invited.
- 5. Methyl Bromide Alternative Symposium. Orlando, Florida. Dec. 1998. Invited.
- 6. Alternative to Methyl Bromide for Lebanon, Beirut. February 1999. Invited.
- 7. Sugar beet Nematode Management. Sugar beet Ag School. Twin Falls. July 1998. Invited.
- 8. Relation of two populations of P. neglectus to potato and Verticillium dahliae. APS Meeting. November 8-12, 1998. Las Vegas, Nevada.
- 9. Presented two papers at SON, Arkansas.
- 10. Presented two papers at THINC.
- 11. Organize and chair symposium on "Cropping Systems Technology Transfer" for Third International Nem. Congress (THINC) in Guadeloupe.
- 12. Nematode problems in Idaho. "American Cyanamid Nematode Symposium." Princeton, NJ. May 8, 1995.
- 13. What to look for in new nematicides. "American Cyanamid Nematode Symposium." Princeton, NJ. May 8, 1995.
- 14. Host status of selected crops to Meloidogyne chitwoodi and Pratylenchus neglectus. Potato Association of America. July 23-27, 1995. Bangor, Maine.
- 15. The impact of green manure crops growing in sugar beet rotation on sugar beet cyst nematode

- population. American Society of Sugar beet Technologists. New Orleans, LA. 1995.
- 16. The effect of composting sugar beet tare dirt, cow manure and cull onion on the viability of sugar beet cyst nematode. American Society of Sugar beet Technologists. New Orleans, LA. 1995.
- 17. The effect of oil radish and white mustard trap crops on sugar beet cyst nematode soil population and subsequent sugar beet yield. Invited speaker for the International Congress of Tropical Nematology, Brazil. 1995.
- 18. The effect of selected crops on the population dynamic of M. chitwoodi and P. neglectus. Invited speaker for the International Congress of Tropical Nematology, Brazil, 1995.
- 19. Summary of Idaho 'Rome Beauty' apple nematode survey. 1994. E. Fallahi and S. L. Hafez. Idaho Fruit Newsletter. Vol. 1(1).
- 20. Alfalfa Nematode Management, Alfalfa University Workshop. Organized by American Alfalfa. Aug 13-16, 1993. Nampa, ID.
- 21. Nematodes, their biology, identification and control. Plant Pathology Short Course. Feb. 8-9, 1993. Ontario, OR.
- 22. Nematode suppression (management). Idaho Soil Fertility and Crop Protection Association 20th Annual Conference. Jan 12-13, 1993. Pocatello, ID.
- 23. Management of Nematode Problems Relative to Potato Production in the Pacific Northwest of the United States. XXV Annual Meeting of ONTA. April 4-9, 1993. Bolivia.
- 24. The effect of composting sugar beet tare dirt and cull onions on the viability of sugar beet cyst nematode. XXV Annual Meeting of ONTA. April 4-9, 1993. Bolivia.
- 25. The role of sugar beet tare dirt in the spread of plant parasitic nematodes. XXV Annual Meeting of ONTA. April 4-9, 1993. Bolivia.
- 26. Sugar beet cyst nematode population response to fall or spring planting of nematode resistant oil radish and yellow mustard varieties. ASSBT Meeting. March 3-6, 1993. Anaheim, CA.
- 27. The effect of sugar beet tare dirt composting process on the viability of sugar beet cyst nematode. ASSBT Meeting. March 3-6, 1993. Anaheim, CA.
- 28. Seasonal decline of sugar beet cyst nematode juvenile and egg population in Idaho. ASSBT Meeting. March 3-6, 1993. Anaheim, CA.
- 29. Utilizing alfalfa nematode resistant varieties for nematode management. Twelfth Annual Nevada Regional Alfalfa Symposium. Feb 17-18, 1993. Sparks, Nevada.
- 30. "Potato and Sugar beet Nematode Management in Idaho". Davis, CA. Oct. 7, 1991.
- 31. The effect of nematode resistant oil radish or yellow mustard on sugar beet cyst nematode". P.H. Peterson Seed Co. Lundsgaard, Germany. June 9-16, 1991.
- 32. "The use of cover crops for sugar beet cyst nematode management". Crystal Sugar Company. Fargo, ND Aug. 27-30, 1991.
- 33. "The Status of Nematicide Uses for Nematode Control in Idaho". Soil Fungi Conference. Reno, NV. April 2-3, 1991.
- 34. "The Effect of Nematode resistant sugar beet hybrids and oil radish varieties on a soil population of sugar beet cyst nematode "Heterodera schachtii." Ninth Biennial Cyst Nematode Workshop. College Park, Maryland. July 5-6, 1991.
- 35. "Nematode problems in Idaho". Landis International Inc. Valdosta, GA, March 21, 1990.
- 36. Chairman Session Colloquium "Production Systems and Soilborne Pathogens," 24th Annual Meeting of Organization of Nematologists of Tropical America, April 27 May 1, 1992, Canary Island, Spain.
- 37. Chairman Session "Cultural Management," 31st Annual Meeting of Society of Nematologists, 2-6 August 1992. Vancouver, British Columbia, Canada.
- 38. Chairman Session "Pathogenicity and Ecology," 30th Annual Meeting of Society of Nematologists. 7-11 July 1991, Baltimore, Maryland.
- 39. Chairman Session "Host Plant Resistance," 23rd Annual Meeting of the Organization of Tropical American Nematologists. 21-26 July 1991, San Antonio, Texas.
- 40. Chairman Session "Host-Parasite Relations, Host Resistance, and Genetics," 27th Annual Meeting of the Society of Nematologists, 12-16 June 1988, Raleigh, North Carolina.
- 41. "The Oat Cyst Nematode in the Northwestern States". International Cyst Nematode Workshop. South Carolina, 1988.
- 42. "Sugar beet cyst nematode management in Idaho". Sugar beet Cyst Nematode Forum. Jackson, WY, Nov. 1985.

PUBLICATIONS IN PROCEEDINGS:

- 1. Saad L. Hafez, Mahesh P. Pudasaini, Ransey Portenier. 2013. Updates on new nematicides for potato nematode management in Idaho. Proceedings of "Idaho Potato Conference" on January 18, 2013.
- 2. Saad L. Hafez, Mahesh P. Pudasaini, Ransey Portenier. 2013. Update for sugar beet nematode management in Idaho. Proceedings of "Idaho Sugar beet Conference" on December 13, 2012.
- 3. Saad L. Hafez, Mahesh P. Pudasaini, Ransey Portenier. 2012. Chemical management of potato nematodes without Temik. Proceedings of "Idaho Potato Conference" on January 18, 2012.
- 4. Saad L. Hafez, Mahesh P. Pudasaini, Ransey Portenier. 2012. Non-chemical options for potato nematode management. Proceedings of "Idaho Potato Conference" on January 18, 2012.
- 5. Saad L. Hafez, Mahesh P. Pudasaini, Ransey Portenier. 2012. New options for the management of nematodes associated with sugar beet in Idaho. Proceedings of "Idaho Sugar beet Conference" on December 16, 2011.
- 6. Hafez, S.L. and R. Portenier. 2011. New development in nematode management on sugar beet in Idaho and eastern Oregon. Proceedings of "Idaho Sugar beet Conference" on January 14, 2011.
- 7. Hafez, S.L. M. P. Pudasaini, and R. Portenier. 2011. The biology of plant parasitic nematodes associated with sugar beet in Idaho and eastern Oregon. Proceedings of "Idaho Sugar beet Conference" on January 14, 2011.
- 8. Hafez, S.L. and R. Portenier. 2011. New development in potato nematode management in Idaho. Proceedings of "Idaho Potato Conference" on January 19, 2011.
- 9. Hafez S. L. and P. Sundararaj, 2010. Soil Sampling A Need for Nematode Management in Potatoes. Proceedings of "Idaho Potato Conference" on January 20, 2010.
- 10. Hafez, S.L. and P. Sundararaj. 2009. Nematodes of alfalfa and their management. Published in the Proceedings of "Western Alfalfa & Forage Conference" held in Reno, Nevada, USA from December 2-4, 2009.

REFEREED/ADJUDICATED (currently scheduled or submitted): (provided citations)

PEER REVIEWED/EVALUATED (currently scheduled or submitted):

PRESENTATIONS AND OTHER CREATIVE ATIVITIES: (i.e. slide sets, web pages, video productions, etc., provide date and location)

International:

SON National meeting, Canada Sugar Beet Research Committee International Meeting, Brussels, Belgium

National.

W-3186 Nematode Committee Meeting, Davis, CA

Regional:

Idaho Potato School Idaho Sugar Beet School Idaho Mint Convention National Mint Research Council (MIRC) IAPP Meeting, Jerome Sugar Beet School, Burley

State:

Ag in the Classroom Mint Tour Syngenta Tour Sugar Beet Tour Beta Seed; Bayer Tour Amalgamated Tour Sugar Beet Tour Mint Research Committee

IPC Meeting

Idaho Seed Industry Association Meeting, Nampa

Idaho Mint Convention

Sugar Beet School, Caldwell;

January: Idaho Potato School; Idaho Sugar Beet School; Idaho Mint Convention, National Mint Research Council

February: Sugar Beet Research Committee; International Meeting, Brussels, Belgium

June: Ag in the Classroom; Mint Tour

July: SON National meeting, Canada; Syngenta Tour

August: Sugar Beet Tour, Beta Seed; Bayer Tour; Amalgamated Tour

September: Sugar Beet Tour; Mint Research Committee

October: IPC Meeting

November: IAPP Meeting, Jerome; W-3186 Nematode Committee Meeting, Davis, CA; Idaho Seed Industry

Association Meeting, Nampa

December: Idaho Mint Convention; Sugar Beet School, Caldwell; Sugar Beet School, Burley

1. The Role of Extension in Nematode Management. Cairo, Egypt. 7 May 1994. (Invited Speaker)

- 2. The use of green manure crops for sugar beet cyst nematode management. Germany. Mar 1994. (Invited Speaker)
- 3. Comprehensive survey of nematode populations and horticultural performance of 'Rome Beauty' apple orchard in Idaho. In Soc. of Nematologists annual meeting. Aug 14-18, 1994. San Antonio, Texas.
- 4. The use of green manure crops in sugar beet rotation for sugar beet cyst nematode management. In 33rd Soc. Of Nematologists annual meeting. Aug 14-18, 1994. San Antonio, Texas
- 5. The effect of composting sugar beet tare dirt, cow manure and cull onions on the viability of sugar beet cyst nematode. Afro-Asian Society of Nematologists 2nd Symposium, Egypt. Dec 17-20, 1994.
- 6. Potato nematode management in the Pacific Northwest of the United States. Afro-Asian Society of Nematologist 2nd Symposium, Egypt. Dec 17-20, 1994.
- 7. The effect of selected crops on the population dynamic of M. chitwoodi and P. neglectus. Invited speaker for the International Congress of Tropical Nematology, Brazil. 1995.
- 8. The effect of oil radish and white mustard trap crops on sugar beet cyst nematode soil population and subsequent sugar beet yield. Invited speaker for the International Congress of Tropical Nematology, Brazil. 1995.
- 9. The effect of composting sugar beet tare dirt, cow manure and cull onion on the viability of sugar beet cyst nematode. American Society of Sugar beet Technologists. New Orleans, LA. 1995.
- 10. The impact of green manure crops growing in sugar beet rotation on sugar beet cyst nematode population. American Society of Sugar beet Technologists. New Orleans, LA. 1995.
- 11. Host status of selected crops to Meloidogyne chitwoodi and Pratylenchus neglectus. Potato Association of America. July 23-27, 1995. Bangor, Maine.
- 12. What to look for in new nematicides. "American Cyanamid Nematode Symposium." Princeton, NJ. May 8, 1995
- 13. Nematode problems in Idaho. "American Cyanamid Nematode Symposium." Princeton, NJ. May 8, 1995.
- 14. The impact of plant parasitic nematode on alfalfa hay production. The 24th California Alfalfa Symposium (Invited Speaker). 1994.
- 15. Sugar beet nematode problems in the Northwest and how it can be managed. "Sugar beet Technical Conference." R.P. meeting. Snowbird, UT. February 13-15, 1995. (Invited speaker).
- 16. Sugar beet nematode control. Idaho Fertilizer and Chemical Conference. Jackpot, NV. January 9-11, 1995. (Invited speaker).
- 17. Root-knot nematode-like symptoms on potato. Idaho Association of Plant Pathology. Nov 22-23, 1994. Boise, ID (Invited Speaker).
- 18. Sugar beet nematode management program in Idaho. Parma Brown Bag Seminar. May 26, 1995.
- 19. Potato Nematode Management in Idaho. Simplot Soil builder grower meeting. February 8, 1995. St. Anthony, ID. (Invited speaker).
- 20. Mint nematode problems in the PNW and their control. Idaho Mint Growers Association. January 16, 1995. Nampa, ID.

- 21. Alfalfa nematode survey in Gem County. Emmett, ID. January 20, 1995.
- 22. Methyl Bromide Alternatives, Santiago, October 3, 2003, Invited.
- 23. Methyl Bromide meeting September 26-30, 2004, Lisbon, Portugal. Invited.
- 24. Organization of Nematologists of Tropical America Annual Meeting, October 4-8, 2004 Invited.
- 25. Invited speaker for First International Symposium on "Biofumigation: A possible alternative to Methyl Bromide?" held on March 31 April 2004 at Florence, Italy. Invited speaker for The MBTOC meeting in Bangkok.
- 26. The Role of Extension in Nematode Management. Cairo, Egypt. 7 May 1994. (Invited Speaker)
- 27. The use of green manure crops for sugar beet cyst nematode management. Germany. Mar 1994. (Invited Speaker)
- 28. Comprehensive survey of nematode populations and horticultural performance of 'Rome Beauty' apple orchard in Idaho. In Soc. of Nematologists annual meeting. Aug 14-18, 1994. San Antonio, Texas.
- 29. The use of green manure crops in sugar beet rotation for sugar beet cyst nematode management. In 33rd Soc. Of Nematologists annual meeting. Aug 14-18, 1994. San Antonio, Texas
- 30. The effect of composting sugar beet tare dirt, cow manure and cull onions on the viability of sugar beet cyst nematode. Afro-Asian Society of Nematologists 2nd Symposium, Egypt. Dec 17-20, 1994.
- 31. Potato nematode management in the Pacific Northwest of the United States. Afro-Asian Society of Nematologist 2nd Symposium, Egypt. Dec 17-20, 1994.

VIDEOS FOR THE PURPOSE OF TEACHING AND KNOWLEDGE OF TRANSFER:

- 1. "Potato Nematodes." Ag. Sci. 490. Lecture #16. 50 minutes.
- 2. "Root-knot and lesion nematodes of potatoes." Ag Comm. 12 minutes.
- 3. "Nematode: The Unseen Enemy." Ag Comm. 9 minutes.
- 4. "Cyst Nematodes of Sugar beets." #161. 8 minutes.
- 5. "Nematodes on Grapes." #187. 6 minutes.
- 6. "Root-knot and Lesion Nematodes of Potatoes." #176. 11.50 minutes.
- 7. "Stem Nematodes of Alfalfa." #177. 6 minutes.

PROFESSIONAL MEETING PAPERS, WORKSHOPS, SHOWINGS, RECITALS: (provide date and location)

- 1. Attended meetings for SON, Sugar Beet in Europe, Syngenta, CSS, and MIRC, 2016
- 2. Hafez, S.L., C. Sevy, K. Luff and P. Sundararaj. 2015. Effect of Movento alone or in combinations with other nematicides on Meloidogyne chitwoodi and Heterodera schachtii on sugar beet. Paper presented at the 54th Annual Meeting of the Society of Nematologists held at East Lansing, Michigan, from July 19-24, 2015.
- 3. Hafez, S.L. and C. Sevy. 2015. New chemistries and compounds for nematode management in potatoes. Paper presented at the 54th Annual Meeting of the Society of Nematologists held at East Lansing, Michigan, from July 19-24, 2015.
- 4. Hafez, S.L., P. Sundararaj and C. Sevy. 2015. Effect of different rates of Nimitz alone or in combination with other nematicides on Meloidogyne chitwoodi on potato and Heterodera schachtii on sugar beet. Paper presented at the 54th Annual Meeting of the Society of Nematologists held at East Lansing, Michigan, from July 19-24, 2015.
- Saranya C., P. Sundararaj and S.L. Hafez. 2015. Detection and density of potato cyst nematodes in the Nilgiris hills of South India, India. Paper presented at the 54th Annual Meeting of the Society of Nematologists held at East Lansing, Michigan, from July 19-24, 2015.

International:

- American Society of Sugar Beet Technologists: Florida, Feb. 23-26, 2015
 Sugar beet cyst nematode management on sugar beet in Idaho using tolerant varieties and reduced rate of Telone II.
- 2. SON Annual Meeting, Michigan, July 19-24, 2015.

 New chemistries and compounds for nematode management in potatoes. Saad L. Hafez and C. Sevy.
- 3. Effect of Movento alone or in combinations with other nematicides on Meloidogyne chitwoodi and Heterodera schachtii on sugar beet. Hafez, Saad, C. Sevy, K. Luff and P. Sundararaj.
- 4. Effect of different rates of Nimitz alone or in combination with other nematicides on Meloidogyne chitwoodi on potato and Heterodera schachtii on sugarbeet. Hafez, Saad, P Sundararaj and C. Sevy.
- 5. Spatial distribution of potato cyst nematodes in the Nilgiris Hills of South India, India. Saranya C., AP.

Sundararaj and S. L. Hafez.

National:

- 1. Mint International Research Council. Las Vegas, NV. January 19-20, 2015. Update on mint nematode research program.
- Washington/Oregon Potato Conference. Kennewick, WA. January 22-29, 2016. New strategies for potato nematode management.
- 3. DOW AgroSciences National Seminar. Minneapolis, MN. Major nematode problems in Idaho and how to manage.
- 4. W-3186 Progress Report in Alabama. Nov. 4-8, 2015.

Regional:

1. Idaho and Oregon Mint Convention. Dec. 3, 2015. Mint nematodes and its management.

State:

- 1. Idaho Potato Conference, Pocatello, ID. January 20-22, 2015. Potato nematode management.
- 2. Idaho Horticultural Society Annual Meeting. Nov. 10-11, 2015, Nampa, ID. Nematode Problems on fruits and its management.
- 3. Sugar Beet School, Boise, Dec. 9, 2015. Sugar beet nematode identification and management.
- 4. Sugar Beet School, Burley, ID. Dec. 10, 2015. Sugar beet nematode identification and management.
- 5. Land view Fieldmen Training. Aug. 26, 2015. Mint nematodes.
- 6. Land view Fieldmen Training. May 1, 2015. Green manure crops.
- 7. Simplot Fieldmen Training, Caldwell, June 12, 2015. Potato and sugar beet nematode management update.
- 8. Gem County Extension Growers Meeting. Sept. 23, 2015.

PATENTS: (provide title/description, patent number and date)

GRATNS AND CONTRACTS AWARDED: (provide principal and co investigators, title, sponsor, funding dates, amount)

1982-2012 + 2015-2019

Grants, Contract and Lab fees \$13,409,703

HONORS AND AWARDS:

SERVICE:

MAJOR COMMITTEE ASSIGNMENTS: (National, State, District, County, University, College, Departmental and dates)

PROFESSIONAL AND SCHOLARLY ORGANIZATIONS: (including memberships, committee assignments, editorial services, offices held and dates)

Afro-Asian Society of Nematologists

Sigma Xi

1985 – Present
Society of Nematologists

1975 – Present
Organization of Nematologists of Tropical America

American Phytopathological Society

Indian Society of Nematology

Indian Society of Nematology

Internal of Nematolo

Journal of Nematology Editorial Board Nematologia Mediterranean Editorial Board

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OUTREACH SERVICE: (Including popular press, interview articles, newspaper articles, workshops-seminars-tours organized, extension impact statements)

- 1. Dr. Saad L. Hafez. Advances in Potato Nematode Management. Potato Progress, Volume XVI, No. 8.
- 2. Saad L. Hafez and Sundararaj Palanisamy. 2016. BUL 909. Nematodes Associated with Onion in Idaho and Eastern Oregon, University of Idaho
- 3. Saad L. Hafez and Mahesh P. Pudasaini. 2012. Sampling the Soil for Managing Nematode Population. Published in Potato Grower magazine, Harris Publishing, Inc. November 2012: 30-33.
- 4. Saad L. Hafez and Mahesh P. Pudasaini. 2012. New approach for Columbian root-knot and root lesion nematodes management using Movento. Published in Idaho Potato Pulse online magazine, Idaho Potato Commission.
- 5. Saad L. Hafez. 2012. The "Root" of the Problem-A new Approach for Nematode Management. Published in Potato Grower magazine, Harris Publishing, Inc. July 2012: 34-36.
- 6. Saad L. Hafez and Mahesh P. Pudasaini. 2011. Management of sugar beet nematodes through crop rotation. Published in Sugar Producer magazine, Harris publishing, Inc. June/July 2011: 15.
- 7. Hafez, S.L. and P. Sundararaj. 2010. Alternative methods for root-knot nematode management for 2010 season. Spudvine. February 2010.

COMMUNITY SERVICE: (non-academic unrelated to employment)

HONORS AND AWARDS:

PROFESSIONAL DEVELOPMENT: (workshops and seminars attend)

TEACHING: SCHOLARSHIP: OUTREACH:

ADMINISTRATION/MANAGEMENT: