euro <i>pass</i>	
Europass Curriculum Vitae	
Personal information	
First name(s) / Surname(s)	Robert Musundire
Address(es)	School of Agricultural Science and Technology, Chinhoyi University of Technology. P. Bag 7724 Chinhoyi, Zimbabwe
Work experience	
Dates Occupation or position held	May 2011-Present Senior Lecturer & Co-ordinator of MSc degree programme on Postharvest Science & Technology
Main activities and responsibilities	Coordinating teaching and learning of MSc degree in Post Harvest Science & Technology, Teaching undergraduate courses on Storage and distribution structures and Post Harvest Entomology. Chinhoyi University of Technology, P. Bag 7724 Chinhoyi, Zimbabwe
Name and address of employer	Sep 2013-2014 Postdoctoral Fellow- Department of Behavioural and Chemical Ecology, <i>icipe</i> - African Insect Science for Food and Health- Nairobi, Kenya. Research on Chemical profiling of the Edible Stinkbug <i>Encosternum delegorguei</i> consumed in the South-eastern districts of Zimbabwe.
Type of business or sector Dates	Part-time Lecturer, Department of Crop Science, University of Zimbabwe P. Bag. MP 167 Mt Pleasant Harare. Teaching courses on Introduction to Entomology and Pesticide Science to undergraduate students and Crop Protection courses to Postgraduate students. Part-time Lecturer, Department of Horticulture, Midlands State University P. Bag. MP 9055, Gweru. Teaching Crop Protection courses to Postgraduate students. Lectureship July 2010 – March 2011
Occupation or position held	Post-Doctoral Research Assistant
Main activities and responsibilities	Research on relationship between leaf herbivory and plant defences of <i>Nicotiana africana</i> : effects on multispecies interactions.
Name and address of employer	Department of Zoology and Entomology, University of Pretoria P. Bag X20, Hatfield 0028, RSA
Type of business or sector	Research
Dates	July 2004 - September 2006
Occupation or position held	Lecturer
Main activities and responsibilities	Teaching Crop Protection courses in the Department of Horticulture.
Name and address of employer	Department Of Horticulture, Midlands State University P. Bag 9055, Gweru, Zimbabwe

Type of business or sector	University Lectures	ship			
Dates	May 2003 to May 2004				
Occupation or position held	Research Officer- Crop protection division				
Main activities and responsibilities	Research on crop protection measures against tobacco insect pests, measures to mitigate yield losses caused by tobacco insect pests, insecticide screening against tobacco pests, and providing technical advisory services to tobacco farmers.				
Name and address of employer	Tobacco Research B	Tobacco Research Board; Kutsaga Research Station, P.O. Box 1909, Harare, Zimbabwe.			e, Zimbabwe.
Type of business or sector	Research and Extension				
Dates	April 2002-April 2003				
Occupation or position held	Research Officer				
Main activities and responsibilities	Provision of technical advisory services on crop protection issues, assisting the pesticide registration officer with registration of new pesticides, national surveillance of the Larger Grain Borer (<i>Prostephanus trancatus</i> (Horn)) in Zimbabwe, research on crop post-harvest pes management in Zimbabwe, plant quarantine and nursery inspections.				
Name and address of employer	Plant Protection Research Institute, Department of Research and Extension, P. Bag CY 550, Causeway, Harare, Zimbabwe				
Type of business or sector	Research and exten	Research and extension			
Education and training					
Dates	2006-2010				
Title of qualification awarded	PhD in Entomology				
Principal subjects/occupational skills covered	Thesis Title : Host plants, herbivores and natural enemies in Kenyan horticulture: tritrophic interactions involving <i>Liriomyza</i> leafminers (Diptera: Agromyzidae).				
Name and type of organisation providing education and training	International Centre of Insect Physiology and Ecology in collaboration with University of Pretoria Funded by the German Development Cooperation (GTZ) and the German Academic Exchange Programme (DAAD).				
Dates	2001-2002				
Title of qualification awarded	MSc Crop Protection				
Principal subjects/occupational skills covered	Weed, insect, fungi, nematodes, plant viruses and bacteria biology, ecology and control, pesticide science and integrated pest management.				
Name and type of organisation providing education and training	University of Zimbabwe Funded by the Belgian Technical Cooperation				
Dates	1997-2000				
Title of qualification awarded	BSc Honours in Ag	BSc Honours in Agriculture- Crop Science			
Principal subjects/occupational skills covered	Farm business management, agricultural economics, cash and industrial crop production, soil fertility, plant breeding and pest management.				
Name and type of organisation providing education and training	University of Zimbabwe Funded by the Government of Zimbabwe				
Personal skills and competences					
Mother tongue(s)	Shona				
Other language(s)					
Self-assessment	Unders	tanding	Spea	aking	Writing
European level (*)	Listening	Reading	Spoken interaction	Spoken production	
English	C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user	C1 Proficient user

Swahili	A2 Basic user	A1 Basic user	A2 Basic user	A1 Basic user	A2 Basic user
	(*) Common Europ	oean Framework o	of Reference for La	anguages	
Social skills and competences	of researchers, tech	nnical and adminis: : Worked with sma	trative staff.	•	staff complement of 15, s, of different tribes and
Organisational skills and competences	Leadership skills: i) Coordinator of the Technology. ii) Senior Proctor at iii) Was the Preside	Chinhoyi Universi	ty of Technology.	0,	oyi University of
Technical skills and competences	protection research	institute and Toba	acco research boa	rd of Zimbabwe.	fficer at the Plant national peer reviewed
Computer skills and competences	Competent with most Microsoft Office programmes and SAS statistical package.				
Driving licence	Valid Class 4 Ziml	oabwean drivers li	cence.		

Additional information

PUBLICATIONS

- 1. **Musundire R**, P Tongoona, C Mutengwa & I Kooman. **2000**. Evaluation of the inheritance of leaf blight resistance in the F₂ Progeny of the SV1 x 9E sorghum (*Sorghum bicolor*) cross. In: Forum 4: Programme and Extended Abstracts. Fourth Regional Meeting of the Forum for Agriculture Resource Husbandry, pp. 156-157. 10-14 July 2000, ACSJ, Lilongwe, Malawi. Forum Working Document No. 1.
- Masaka J, R Musundire & C Koga. 2007. A comparative study of pine bark substrate alternatives in tobacco (*Nicotiana tabacum*) float seedling production systems. International Journal of Agricultural Research 2: 11-12.
- 3. Masaka J, **Musundire R** & Gondongwe L. **2007**. The effect of float seedling growth media combination and particle size distribution on germination and biometric characteristics of tobacco seedlings (*Nicotiana tabacum*). *International Journal of Agricultural Research* 2: 459-467
- 4. **Musundire R**, A. Chabi-Olaye, B Löhr & K Krüger. **2011**. Diversity of Agromyzidae and associated hymenopteran parasitoid species in the Afrotropical region: implications for biological control. *BioControl* 56: 1–9.
- 5. **Musundire R,** Chabi-Olaye A, Krüger K, Salifu D. **2012**. Host plant-related oviposition behavior and host feeding activities of *Diglyphus isaea (Hymenoptera*: Eulophidae) on *Liriomyza huidobrensis*, *L. sativae* and *L. trifolii* (Diptera: Agromyzidae). *Journal Economic Entomology* 105: 161-168.
- 6. **Musundire R,** Chabi-Olaye A & Krüger K. **2012**. Host plant effect on morphometric characteristics of *Liriomyza huidobrensis*, *L. sativae* and *L. trifolii* (Diptera: Agromyzidae). *Journal of Applied Entomology* 136:97-108.
- 7. Macheka L, Manditsera F, Ngadze R, Mubaiwa J, **Musundire R. 2013**. Identifying causes of mechanical defects and critical control points in fruit supply chains: An overview of a banana supply chain'. Journal of Postharvest Technology and Innovation. *International Journal of Postharvest Technology and Innovation*. 3 (2) 109-122.
- 8. Zvidzai CJ, Chidewe C, **Musundire R. 2014**. Preliminary chemical analysis of extracts from *Encosternum delegorguei* using Gas Chromatography Mass Spectroscopy *Journal of Biopesticides*. **6**: 211-218.
- Musundire R, Zvidzai CJ, Chidewe C. 2014. Bio-active compounds composition in Edible Stinkbugs consumed in South-eastern districts of Zimbabwe. *International Journal* of *Biology*. 6: 36-45.
- Zvidzai CJ, Chidewe C, Mubaiwa J, Tinofa S, Munjeese W, Musundire R. 2014. Pilot plant optimization for alcohol production in fermentation of opaque beer by varying sieve size. Fermentation Technology. http://dx.doi.org/10.4172/2167-7972.1000111
- 11. **Musundire R**, Zvidzai CJ, Chidewe C, Samende BK, Manditsera FA. **2014**. Nutrient and anti-nutrient composition of *Henicus whellani* (Orthoptera: Stenopelmatidae), an edible ground cricket, in south-eastern Zimbabwe. *International Journal of Tropical Insect Science*. **34**: 223–231. doi:10.1017/S1742758414000484.
- Musundire R, Mazodze F, Macheka L, Ngadze RT, Mubaiwa J, Manditsera F. 2014. Eucalyptus grandis and Tagetes minuta leaf powders effectively protect stored maize against Sitophilus zeamais without affecting grain organoleptic properties. African Journal of Agricultural Research. 10: 49-57.
- 13. Musasa ST, **Musundire R**, Mashingaidze AB, Makuza SM. **2015**. A preliminary study of the orange (*Citrus sinensis*) fruit value-chain in Chimanimani Rural District, Zimbabwe. *African Journal of Agricultural Research*, 10 (10). DOI:105897/AJAR2014.x
- Zvidzai CJ, Mugova K, Chidewe C, Musundire R. 2015. Using 16S rRNA identification of an Endoß-1,4-glucanase producing endophyte from *Brachytrupes membranaceus* gut. Asian Journal of Applied Sciences 3. www.ajouronline.com.
- Musundire R, Cheseto X, Osuga I, Irungu J, Torto B. 2016. Aflatoxin Contamination Detected in Nutrient and Anti-Oxidant Rich Edible Stink Bug Stored in Recycled Grain Containers. PLOS ONE. DOI:10.1371/journal.ponc.0145914.
- 16. **Musundire R**, Zvidzai CJ, Chidewe C, Ngadze R, Macheka L, Manditsera FA, Mubaiwa J, Masheka A. **2016**. Nutrient and anti-nutrient composition of *Eulepida mashona*, an edible beetle in Zimbabwe. *Journal of Insects for Food and Feed* (in press).

17. **Musundire R**, Zvidzai CJ, Chidewe C, Samende BK., Chemura A. **2016**. Habitats and nutritional composition of edible insects of Zimbabwe. *Journal of Insects as Food and Feed. Special Edition* (in press).

Books/Book Chapters

- Musundire R & FT Mugabe 2012. Handbook on Small-Scale Vegetables Production for Food security in semi-arid areas. Chinhoyi University of Technology Publication. ISBN 978-0-7974-4994-7.
- 2. **Musundire R**, Mashingaidze AB, Macheka L. **2014.** Manual for improved cereals and legumes postharvest systems in Zimbabwe: Enhancing household food security for smallholder farmers though better postharvest management. FAO publication.
- 3. Mwangi M, Muigai NN, **Musundire R,** Muasya R, Mezzetti B, Steutzel H. **2014.** Reference manual on agriculture teaching skills in higher education institutions. ISBN 97899667415 8 X© Kenyatta University.
- **4.** Mwangi M, Muigai NN, Kaugi E, **Musundire R,** Hamadziripi N, Muasya R, Bua B, Mezzetti B, Steutzel H**. 2014.** Reference manual on curriculum development skills for agriculture in higher education institutions. ISBN 97899667415 8 X © Kenyatta University.
- **5.** Mwangi M, Muigai NN, Kaugi E, **Musundire R,** Hamadziripi N, Muasya R, Bua B, Mezzetti B, Steutzel H. **2014.** Manual on management of agriculture teaching and research in higher education institutions. Kenyatta University.
- **6. Musundire R.**, Zvidzai C.J., Chidewe C., Macheka L., Manditsera F. A., Ngadze R.T., Mubaiwa J., Samende B., Chemura A. **2016.** Edible insects of Zimbabwe: a guide for identification, harvesting, preparation for consumption and nutritional composition. *(in press)*

Working papers

- Musundire R, Zvidzai C, Chidewe C, Samende B.K., Chemura A., Bangira C. Termite
 mounts soil properties signify nutritional, mineral composition and anti-oxidant content
 in the edible soldier termites *Macrotermes natalensis*. International Journal of
 Tropical Insect Science.
- **2. Musundire R**, Jimu F, Makuza S.M., Maboreke, KM, Muzemu S. 2015. Within-season insect population dynamics in *Vigna unguiculata* L. and *Gossypium hursitum* intercrop in mid-altitude areas of Zimbabwe. **Crop Protection.**
- Mashavakure N, Mashingaidze A.B., Musundire R, Nhamo N, Gandiwa E, Bere T, Thierfelder C and Patrick F. Epigeal spiders as indicators of predator response to conservation agriculture in a tropical environment. Journal of Acarology.
- 4. Musasa ST, Aguiar ARM, Vieira J, Vieira C, Mashingaidze AB & Musundire R. Fruit fly identification, population dynamics and fruit damage during fruiting seasons of sweet oranges in Rusitu Valley, Zimbabwe. Journal of Agricultural and Forest Entomology.

Technical/policy reports

Mvumi, B.M. & **Musundire**, **R. 2003**. DEs included in the post-harvest IPM strategy. LGB Training Workshop, Mt Darwin, Zimbabwe, 23-25 April 2003.

Current Research Projects

- 1. Nutritional and biochemical analysis of anti-nutritional compounds in edible insects of Zimbabwe. Funded by Chinhoyi University of Technology.
- 2. Insecticidal and nematicidal properties of extracts of *Encosternum delegorguei* Spinola (Hem., Tessaratomidae) on tobacco, brassicas & storage pests.
- Diversity of the invasive *Liriomyza* species and associated parasitoid species in Zimbabwe (A collaborative project between Chinhoyi University of Technology, & Dr. Eliane de Coninck, Africa Museum, Belgium).

Publications Accepted

Conferences/workshops

- Musundire, R., Löhr, B. & Krüger, K. Diversity of Agromyzidae and associated parasitoid species in the Afrotropical region. XXIII International Congress of Entomology, Durban, South Africa, July 2008. (oral presentation).
- 2. ICIPE Workshop on IPM in Horticultural Production Systems. *First All Africa Horticulture Congress*: Nairobi, Kenya, 31 August 3 September 2009. (workshop; chair: Dr A. Chabi-Olaye, rapporteur: Mr R. Musundire).
- DAAD Workshop on modeling post-harvest quality of high value crops in East Africa, Nairobi, Kenya 15-22 May 2010.
- 4. BioVision.Nxt fellowship programme at BioVision 2011- the World Life Sciences Forum, Lyon, France (March 25-29).
- 5. Zimbabwe Council of Higher Education (ZIMCHE) and Zimbabwe Academy of Sciences (ZAS) young scientist forum. 17 October 2011, Crown Plaza, Harare, Zimbabwe.
- 6. 19th Conference of the African association of Insect Scientists. 09- 12 November 2011, *icipe*, Nairobi, Kenya.
- 7. Semio-11 workshop. Insect chemical ecology and multilevel pest management towards food security and sustainable development. 12-15 November 2011, *icipe*, Nairobi, Kenya.
- 8. 11th workshop on sustainable horticultural production in the tropics. Analysis of Horticulture course content and research agenda. 7-10 December 2011, Pwani University College (PUC), Kilifi, Kenya.
- 9. 20th Conference of the African Association of Insect Scientists. 27-31 October 2013, Yaounde, Cameroon.
- Musundire R, Zvidzai CJ, Chidewe C & Manditsera F. Nutritional & bioactive compound assessment of rare edible monster crickets & termites consumed in South-eastern districts of Zimbabwe. Insects to feed the world. International Symposium, 14-17 may 2014, Ede, The Netherlands. (oral presentation).
- 11. **Musundire R**, Cheseto X, Torto B. Chemical profiling in the Edible stinkbug, *Encosternum delegorguei* consumed in South-eastern districts of Zimbabwe. Insects to feed the world. International Symposium, 14-17 may 2014, Ede, The Netherlands. (oral presentation).
- Joint stakeholder conference for the ACP-EU cooperation programme in higher education (EDULINK II), the ACP Science & Technology Programme (ACP S& T) and the ACP Caribbean & Pacific Research Programme for Sustainable development. 1-2 April 2014, Brussels, Belgium.
- Musundire R., Mwangi M., Mugabe F.T., Maboreke K.M. 2014. Baseline report on the status of Agricultural training in higher education institutions in Zimbabwe. International conference on building a new generation of Agricultural scientists 1-5 December 2014, Kenyatta University, Nairobi, Kenya.
- Musundire R. Postharvest Science and Technology Degree programmes: Experiences from Chinhoyi University of Technology. Oral presentation. Mid-term review workshop for Edulink II Project. Kyambogo University, Kampala. 6-7 August 2015.
- 15. Workshop program for managers of agriculture teaching and research in higher education institutions, 12-14 October 2015. Kenyatta University, Nairobi, Kenya.
- 16. Musundire R, Zvidzai CJ, Chidewe C, Samende BK, Chemura A. 2015. Habitats and nutritional composition of selected edible insets in Zimbabwe. Oral presentation. 21st Meeting and Conference of African Association of Insect Scientists 19-23 October 2015, Palais des Congrès de Cotonou, Bénin.

Additional information Short courses

- 1. Transition to sustainable agriculture, Integrated pest management policy and institutional innovations, Pesticides and food safety in integrated pest management and Good Agricultural Practices. Wageningen University and Research Centre, Netherlands, May-July 2005.
- Effective scientific communication and publishing. Training Centre in Communication. Nairobi University, Kenya, 11-15 December 2006.
- 3. Crop Protection Biology: Semiochemicals in pest control and conservation biology. Swedish University of Agricultural Sciences, Department of Ecology, Lund University, Sweden, 13-24 March 2008.
- 4. Lost Harvest & Wasted Food managing the crop supply chain for increased food security. Wageningen, the Netherlands, 9 – 20 September 2013.
- Management of Internationalisation in higher education 2016/2017 (Leibniz Universität Hannover in cooperation with Universidad de Guanajuato-UG, Mexico, Manipal University, India and Jomo Kenyatta University, Kenya.

Teamwork and collaboration with others

- Member of the Larger Grain Borer Steering Committee of Zimbabwe (2003-2004).
- Member of the Chinhoyi University of Technology steering committee for the University Strategic Plan 2011-2015.
- Project Coordinator- Edulink II Project FED/2013/320-148: enhancing nutrition and food security through improved capacity of Agricultural Higher Education Institutions in East and Southern Africa. Teaching and Curriculum Development Review.
- Principal Investigator TCP/ZIM/3402SFSD/044/13. Support to national capacity development in crop postharvest management project.

Visits to universities or research institutes as researcher/Professional attachments

Study visit regarding "Diversity of Agromyzidae and associated hymenopteran parasitoid species in the Afrotropical region: implications for biological control"; 4 – 22 January 2010; Royal Museum for Central Africa, Belgium.

Membership of Professional Associations

1. Member of the African Association of Insect Scientists.

External Examination of degree programs

1. Agricultural practice course: University of Zimbabwe.

Supervision of Postgraduate Students

Master of Philosophy (MPhil) – Chinhoyi University of Technology

1. Stephen Tawanda Musasa. Optimising orange (Citrus sinensis) fruit production value chain to improve quality and shelf-life of oranges in Risutu Valley, Zimbabwe.

Master of Science (MSc)

- Nyama Simba: A comparative study of chillies, ash, autoclaving and castor oil on the development and control of Callosobruchus rhodesianus on Vigna unquiculata cultivars. MSc Postharvest Science & Tech. Chinhoyi University of Technology.
- Mawanza Emmanuel: Comparison of improved and traditional granaries on grain extraction and grain quality preservation. MSc Postharvest Science & Tech. Chinhoyi University of Technology.
- 3. Dzoro M. An analysis of aflatoxin contamination of Zimbabwe cereal based opaque beer. MSc Postharvest Science & Tech. Chinhovi University of Technology.
- Hungwe Severino: Evaluation of the efficacy of biopesticides control against Bruchids (Callosobruchus maculatus) in Cowpeas (Vigna unquiculata) based on Indigenous Knowledge Systems (IKS) in UzumbaMarambaPfungwe (UMP) District Wards 4 and 5. MSc Postharvest Science & Tech. Chinhoyi University of Technology.
- Masheka A: Formulation of Ready To -Use Therapeutic food with high nutritional qualities. MSc Postharvest Science & Tech. Chinhoyi University of Technology.
- Mutandani V: Sweet potato pests affecting tubers MSc Postharvest Science & Tech. Chinhoyi University of Technology.
- Chinyise Tiniel: Maize (Zea mays) grain post harvest losses under farmer storage conditions: Relationship between Larger Grain Borer (Prostephanus tranctus Horn) infestation and storage practices in Zvimba District of Zimbabwe. Graduated at Chinhoyi University of Technology.

	 Makanda A. Rumbidzai: Cultivated fruit host range of <i>Bactocera invadens</i> in Mashonaland West Province of Zimbabwe and evaluation of some non-chemical fruit fly control measures. Graduated at Chinhoyi University of Technology. Mositafu Tichaona: The efficacy of <i>Combretum imberbe</i> (Mutsviri ashes) in controlling <i>Callosobrunchus maculatus</i> infestation in <i>Vigna unguiculata</i> (cow peas). Graduated at Chinhoyi University of Technology.
Pr	nD students
	 Nilton Mashavakure: Arthropod, nematode and weed dynamics in a maize cropping system under conservation agriculture. Registered at Chinhoyi University of Technology, Zimbabwe. Shepherd Musiyandaka: Validation of an organic cotton pest management system for small holder farmers in Zimbabwe developed through farmer field school based participatory research (FPR). Registered at Chinhoyi University of Technology, Zimbabwe. Annabel Banda: Soil type effect on the seasonal diversity and population dynamics of fleas and associated rodents inhabiting arable and non-arable land: implication of plague transmission. Registered at Chinhoyi University of Technology, Zimbabwe. Pahla Innocent: Distribution, abundance and host plant interaction of native parasitoids of the invasive Liriomyza species in Zimbabwe. Registered at Midlands State University, Zimbabwe.
Ex	camination of Postgraduate Students
	External examination for Mr Raphel T. Muzhandu, MPhil Thesis. Midlands State University, Zimbabwe.
F	PERSONAL INTERESTS Photography of natural landscapes and historical monuments. Love to travel and experience different cultures. Playing Volleyball.

Referees and Contact Addresses

1. Professor Baldwyn Torto

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