

CURRICULUM VITAE

General Information

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KISUMU, KENYA.
Email: gdodhis@yahoo.co.uk, gdodhiambo@maseno.ac.ke,
SEX: MALE
BIRTH: 23-9-54
NATIONALITY: KENYAN
LANGUAGE: ENGLISH, SWAHILI AND LITTLE SPANISH.
QUALIFICATION: PhD., 1998.
PRESENT EMPLOYER: MASENO UNIVERSITY.
CURRENT POSITION: Associate Professor and Ag. Dean, School of Agriculture and Food Security.
MAJOR FIELD: Crop Science.
CURRENT PROJECTS: RESEARCH ON *STRIGA* CONTROL IN WESTERN KENYA:-

1. Integrated soil fertility management for *Striga* control and enhanced system productivity in western Kenya. (3 years and Funded by IITA for US\$. 150,000.00)
2. Enhancing capacity of Maseno University Seed Unit to deliver to market resilient new maize varieties in Western Kenya. (1 year and Funded by USAID through Land O'Lakes for US\$. 60,000.00)

PAST PROJECTS:

1. Development and Diffusion of an Integrated *Striga* control options in western Kenya (KARI/BMZ/GTZ). This involved the development of *Striga* control options and training materials, which were then disseminated to farmers through CAREs TRACE approach in comparison with conventional extension approach by the government.
2. On-farm demonstration of Integrated *Striga* control options in western Kenya through small grants provided by the East African Cereals Project (ECAP) and ECAMAW networks from 1997 to 2001.
3. Strengthening Maize Seed Supply Systems for Small-Scale Farmers in Western Kenya and Uganda Seed Project. Aims at strengthening the capacity of smallholder farmers to produce their own maize seed.
4. Evaluation (regional testing) of maize germ plasm developed under the African Maize Stress Project within CIMMYT.
5. On-farm Demonstration of *Striga* Control Options (within the African Highlands Initiatives' (AHI) Eco-regional Program on Integrated Watershed Management in western Kenya, a collaborative venture between KARI and ICRAF in Kenya but also implemented in Ethiopia, Uganda, Tanzania and Madagascar).
6. On-farm demonstration of integrated pest and soil management to

combat *Striga*, stemborers and declining soil fertility in the Lake Victoria basin. (Funded by DFID with ICIPE, CIMMYT, TSBF, KARI, NARO Uganda and Tanzania as Partners).

7. AATF *Striga* Management Project as a KARI Collaborator

SHORTTERM COURSES:

- i) INTRODUCTION TO GIS AND PC ARC/INFO 3.41:
held at the Thunder & Associates, Inc. GIS Training Lab, Nairobi from February 28 to March 11, 1994.

COMPUTER SKILLS: MsWord, MsExcel, SAS, Mstatc and Word Perfect, SPSS.

EMPLOYMENT RECORD:

1. Dean, School of Agriculture and Food Security from October 2014 to date
2. Chairman, Department of Applied Plant Science from March 2012 to October 2014.
3. Lecturer from 2004 to 2007
4. Senior Lecturer from 2007 to 2010.
5. Associate Professor from 2010 to date
6. Coordinator, timetable and examination from 1st February 2004 to January 2006
7. Coordinator, industrial attachment and field trips for department from March 2005 to 2014
8. Chairman, Ad Hoc committee on restructure of course/programs in 2005 to 2007
9. Maseno University Acting Chairman, Department of Botany and Horticulture on 22nd October 2007 and between 17th to 30th April 2009
10. KARI from July 1989 to 2003 as a Senior Research Officer.
11. Ministry of Agriculture (Scientific Research Division) July 1983-June 1989

Rewardable Attributes

Leadership/coordination activities including production of project reports

1. National Technical Coordinator, *Striga* Research (25th November 1998 to date). This involves bringing together scientists conducting research and dissemination activities related to *Striga* weed in Kenya through annual meetings to avoid duplication.
2. Area Co-ordinator (Coastal Region), Fertilizer Use Recommendation Project (BMZ/GTZ funded) between 1987-1990.
3. Chairman of the *Striga* Working Group consisting of scientists from East and Central Africa conducting research on *Striga* weed between 1993-1994.
4. Principal Investigator, AHI sub-theme on IPM for controlling *Striga* in Emuhaya, Vihiga district in collaboration with ICRAF. As the team leader of a multidisciplinary team of scientist, it was my responsibility to ensure coordination and ensure that our dissemination strategy to farmers is well organized and was responsible for the management of the funds. This activity had an inbuilt monitoring and evaluation component and was conducted in a participatory way with the clients.
5. A member of the Steering Committee of the System-Wide Programme on Integrated Pest Management (SP-IPM) pilot site project in Lambwe Valley, western Kenya from January 2000 to 2002. This is a partnership between ICIPE, KARI, MoARD, CIMMYT, ICRISAT, CABI INTERNATIONAL, CARE-KENYA AND CATHOLIC DIOCESE of HOMABAY in the dissemination of best-bet IPM technologies to control *Striga* weed and stem borers in maize. The basic concept is for several IARCs, working with NARES to bring together their best-bet IPM technologies at selected sites in Africa in a participatory process with farmers
6. Acting Centre Director, National Sugar Research Centre-Kibos, August 24th to 28th 1998.
7. Acting Centre Director, National Fibre Research Centre-Kibos, December 21st 2001 to 31st

January 2002.

8. Attachment to CIMMYT-Kenya between 1st March 2001 to October 2003 (80% of my staff time in the following projects:-
 - i) Strengthening Maize Seed Supply Systems for Small-Scale Farmers in Western Kenya and Uganda Seed Project. Aims at strengthening the capacity of smallholder farmers to produce their own maize seed.
 - ii) Evaluation (regional testing) of maize germplasm developed under the African Maize Stress Project within CIMMYT for *Striga* tolerance

Consultancies

1. Feasibility study and Initial Environmental Audit of the Irrigation Projects and Agroforestry for Homa Hills Community Development Organisation, HomaBay, Kenya September 2006.
2. Feasibility Study Environmental Impact Assessment Report For Burinda Community Development Outreach (BUCODO), Busia. Promotion of Pond Fish Farming June 2007.
3. Feasibility Studies On The Proposed Rehabilitation Of Miwani Sugar Mills Sugarcane Availability And Potential For The Production Increase Capacity From 1,200 TCD To 5,000 TCD. October 2007.
4. Conduct a situational analysis of 'Humidtropics program' covering production systems and natural resource management and environment in the West Kenya action site for International Livestock Research Institute (ILRI), Nairobi from April to June 2014.

Educational achievements.

University	Main discipline	Degree awarded
NAIROBI, KENYA	AGRICULTURE	BSc. AGRIC.
MISSOURI, USA	SOIL SCIENCE	MSc. AGRONOMY
READING, UK	WEED SCIENCE	PhD.

Dissertation/thesis title for postgraduate degree (MSc, PhD)

- i) **MSc.** Nitrogen sources and placement under no-till corn. MSc. Thesis, University of Missouri, Columbia, USA.
- ii) **PhD.** Studies on witchweed (*Striga hermonthica* (DEL.) BENTH) seed longevity and maize (*zea mays*) productivity under different management systems in Kenya. PhD. Thesis, pp. 198.

Post-graduate diploma.

CROP MANAGEMENT at CIMMYT, Mexico for 6 months in 1984

Final report on production system description, constraint identification, analysis and prioritization.

African Highlands Initiative (AHI) Report on Participatory Agro-ecosystems Management (PAM) Analysis of Emuhaya Division of Vihiga District, western Kenya. Edited by: Otieno, K., Odendo, M., and Ojiem, J., Golf Hotel Kakamega 7th to 11th December 1998.

Production of a final technical report on problem solving project based on community study.

1997. Phase I Final Report of KARI/AHI Research Activities in western Kenya by Oduori, C.O.A., John Achieng', V.N. Ogaro, Munywere Walter O, Inzaule, S, Otysula, R.M., Mwangi, E, H.M. Obiero, John Ojiem, George D. Odhiambo, Qureish Noordin, Dr. K. Otieno, Henry Ogola Aloo.

My contribution: On-farm Demonstration of *Striga* Control Strategies..

2001. Phase II Final Report of KARI/AHI Research Activities in western Kenya by Oduori, C.O.A., John Achieng', V.N. Ogaro, Munywere Walter O, Inzaule, S, Otysula, R.M., Mwango, E, H.M. Obiero, John Ojiem, George D. Odhiambo, Qureish Noordin, Dr. K. Otieno, Henry Ogola Aloo.

My contribution: On-farm Demonstration of Integrated Pest Management (IPM) Strategies on *Striga*

2003. Integrated *Striga* (*Striga* sp.) management approaches: experiences with *S. hermonthica* from western Kenya. Eva Gacheru, George Odhiambo, Fred Kanampiu, Bashir Jama and Dickens Nyago.

Major Research Grants Awarded

- 1. January 2005 to February 2007. *Striga* Management Project entitled “*Striga* control in western Kenya: Raising awareness, containing and reducing the infestation and developing strategies for eradication” in collaboration with SCODP, SACRED Africa TSBF-CIAT, Maseno University, Moi University and FORMAT to the tune of US\$ 35,1154.00**
- 2. 01 October 2002 to 31 December 2005.** DIFID funded project on “Integrated pest and soil management to combat *Striga*, stemborers and declining soil fertility in the Lake Victoria basin” in Kenya, Uganda, Tanzania to the tune of **£283,650.00**
- 3. 1995-1997:** Principal Investigator in the project titled “Studies on witchweed (*Striga hermonthica* (DEL.) BENTH) seed longevity and maize (*zea mays*) productivity under different management systems in Kenya” funded by Rockefeller Foundation. US\$. 26,900
- 4. 2000 – 2002: Co-Investigator** in the project entitled “**Studies On Effects Of Maize And Sesame Mixed And Rotation Cropping Systems On *Striga* Infestation**” funded by ROCKEFELLER FOUNDATION. US\$. **66,760**
- 5. 2004-2007: Co-Investigator in the project titled** “*Striga* Control in Western Kenya: Raising awareness, containing and reducing the infestation and developing strategies for eradication” funded by AATF. US\$. 57,942.
- 6. 2008: Co-Investigator in the project titled** “The *Striga* Technology Extension Project (STEP)” funded by AATF. US\$. 329,384
- 7. 2010: Principal Investigator** in the project entitled “**Integrated *Striga* control and improved soil health in western Kenya**” funded by AATF. US\$. **132,300**
- 8. 2010-2012: Principal Investigator,** in the project titled “**Unlocking cereal production by Eliminating *Striga* threat and improving soil health in Western Kenya**” funded by Kilimo Trust. US\$. **124,922.**
- 9. 2011: Principal Investigator** in the project titled “**Scaling Up Commercialization and Adoption of WS 303 Maize Variety in Western Kenya**” funded by AATF. US\$. **42,000**
- 10. 2012: Principal Investigator** in the project titled “**Scaling Up Commercialization and Adoption of WS 303 Maize Variety in Western Kenya**” funded by AATF. US\$. **67,320**
- 11. 2012: Principal Investigator** in the project titled “**BASF support to *Striga* control project**” funded by BASF. €. **10,000.**
- 12. 2014: Consultant** to conduct situational analysis of ‘Humidtropics program’ covering production systems and natural resource management and environment in the West Kenya action site for International Livestock Research Institute, Nairobi from 26th March to 23rd June 2014 funded by ILRI. US\$. **21,000.00.**
- 13. 2014-2015: Co PI in the project** "Enhancing capacity of Maseno University Seed Unit to deliver to market resilient new maize varieties in western Kenya" funded by Land O' Lakes.

KES. 4,891,855.

14. 2014-2015: Principal Investigator. "Integrated soil fertility management for striga control and enhanced system productivity in western Kenya". funded by IITA. **US\$. 50,000.00**

15. 2018-2020: Principal Investigator Mitigation of Climate Change Through Sustainable Integration of Maize Based Agro-Forestry Systems for Food Security and Poverty Reduction in Western Kenya. **KES. 10,234,620.00**

Minor Research Grants Awarded

AHI Small Grants in Emuhaya, Vihiga district:

1. On-farm demonstration of *Striga* Control Options. Level of funding was US\$ 3,830.00 during 1999 season and US\$3,000.00 during 2000 cropping season
2. On-farm demonstration of Integrated Nutrient and Pest Management (INM and IPM) Strategies on *Striga*, bean root rot and bean stem maggot. Level of funding US\$ 2,685.00 for 2001.

ECAMAW Small Grants:

1. On-farm demonstration of *Striga* Control Options in Vihiga district. Level of funding was US\$ 2,300.00 in 1997, US\$ 2,699.00 in 1998 and US\$ 3,000.00 in 1999
2. On-farm demonstration of *Striga* Control Options in Vihiga district. Level of funding was US\$ 3,000.00 in 1999.
3. On-farm trial on the effect of bean population and planting arrangement on *Striga* incidence and yields of maize and beans intercrop systems in Vihiga and Kisumu districts. Level of funding was US\$ 3,559.00 in 1999.
4. Farmer participatory on-farm evaluation of maize OPVs and intermediate late hybrids for the humid lowlands using the mother and baby methodology in western Kenya. Level of funding was US\$ 2,400.00 during 2001 cropping season.
5. AMS regional trial of maize varieties for disease resistance top crosses and late top cross hybrids in western Kenya. Level of funding was approximately US\$ 3,600.00 during 2002 LR.
6. AMS regional trial of maize varieties for double top crosses in western Kenya. Level of funding is approximately US\$ 1,600.00 during short rains 2002.

OAU/STRC-SAFGRAD Small Grants:

Multi-location testing of maize varieties for tolerance /resistance to *Striga hermonthica* in western Kenya during 1999-2000 cropping seasons. The level of funding was US\$ 4,000.00.

Supervision of MSc thesis.

1. **Omuony, M.J. (Graduated 2006)** Evaluation of sesame cultivars as trap crops for the control of *Striga* weed in a rotational cropping system involving maize and assesment of the importance of sesame as a crop in western Kenya
2. **Oteko, J.O. (Graduated 2012)** Evaluation of different sesame (*Sesamum indicum* L.) genotypes for use as trap crops in an intercropping system for control of *Striga hermonthica* weed in maize production in western Kenya.
3. **Kwach, J.K.** PG/ MSc. / 050 / 2002 (**Graduated 2008**). Multilocal Testing and farmer evaluation of sweetpotato [*Ipomoea batatas* (L.) LAM.] varieties in southwestern Kenya for commercial and domestic use
4. **Muhinja Daniel Kamau.** PG/MSC/021/02.(MSc: (**Graduated 2013**)). Effect of Adoption of Improved Farm Management Technologies on Household Food Security in Isiolo District.
5. **Makori, M.N. PG/MA/069/2005. (Graduated 2011)** "The impact of national

agriculture and livestock extension programme on milk production in Gucha District, Kenya..

6. **Mbogo, P.K.** PG/MSc/030/05. (Graduated 2010). The effect of gray leaf spot on yield and yield components of maize in western Kenya.
7. **Illa, A.O.** PG/MSc/032/06. (Graduated 2010). The effect of imazapyr resistant maize (*Zea Mays L.*) plant density under bean intercrop on *Striga hermonthica*, maize and bean yield.
8. **Okochi, B.O.** PG/MSc/ . (Graduated in 2008). Management of Fusarium Yellowing Disease (*Fusarium Oxysporum* Schl.F.SP Phaseoli-Kendrick and Snyder) on Common Bean (*Phaseolus Vulgaris-L*) using selected plant extracts.
9. **Liech P.A.** PG/MSc/034/08. (Has defended). The role of Indigenous Technology for Preservation of African Leafy Vegetables on Food Availability and Nutrition in Lambwe Division, Suba District.
10. Oyunge Denis. **PG/MSc/042/2009.** (Graduated 2013). Assessing farmers' participation in *Striga* management projects in Gem and Emuhaya Districts of Western Kenya.
11. **Dorah Auma Oula** PG/MSc/039/07 (Graduated 2017). The Effects Of Local Isolates Of *Fusarium Oxysporium F. Sp. Strigae* As An Antimicrobial Agent For *Striga (Striga Hermonthica (Del) Benth)* Weed Control On Maize In Western Kenya.
12. Osieyo Samuel
13. Ofuyo Dorcus

Supervision of PhD thesis.

1. **Achieng', J.O.** PG/PhD/Hort-/2005. (Graduated Dec 2013) Agronomic options to address biodiversity and productivity gaps in farming systems of Kakamega, western Kenya
2. **Ogolah, H.A.** PG/PhD/022/2002. (Graduated Dec 2013) Effects of Phosphorus On Nitrogen Dynamics And Uptake In Maize-Desmodium Intercrop In Western Kenya.
3. **Nyambati, R.O.** AGR/D.PHIL/06/05. of Moi University (Graduated 2011). Integrated Use Of Plant Residues And Urea On Maize Performance And *Striga* Management In Western Kenya

Internal Examination

1. **Sikuku, P.A.** PG/MSc/ .(Graduated in 2007). Effects of Water Deficit on Growth and Development of NERICA Rainfed Rice (*Oryza sativa L.*).
2. **Lawi J.O.** PG/MSc/030/02. (Graduated in 2008). Survey of the Production and Investigation into Propagation of Semi-Domesticated Jambolana (*Syzygium Cumini* (L) Skeels in western Kenya.
3. **Mukiri, B.G.** PG/MSc/014/06. (Graduated in 2008). Genetic variation and agronomic performance of some wild and cultivated watermelon (*Citrullus* sp.) accessions grown on dystic nitosols under sub-humid tropical conditions of Maseno division, Kenya.
4. **Joseph Kiprop Maritim** (Maseno University) internal examination of MSc. Thesis for in October 2005. Response of African Nightshade (*Solanum Scabrum*) to intercropping with Tea (*Camellia Sinensis*)
5. **Gathoni, A.W.** (Graduated 2011). MSc. Thesis. The effects of extracts of *Ocimum gratissimum*, *Ipomoea Batatas* and *Brassica Oleracea* var. Botrytis on growth and disease-causing capabilities of *Ralstonia Solanacearum* Tuberosum.

6. Otieno Caren Adhiambo. (**Graduated 2012**). internal examination of MSc. Thesis. Role of composting on nutritional composition of agricultural wastes used for cultivation of native wood ear mushroom (*Auricularia Auricula* L.)
7. Ms. Ruth A. Orlale (**Graduated 2012**) internal examination of MSc. Thesis. Impact of Trade Liberalization Policy on Small Scale Rice Farms Food Security and Income in the Ahero Irrigation Schemes, Nyando District, Western Kenya.
8. Chumba Reuben B. (**Graduated 2012**) internal examination of MSc. Thesis. Effect of Spacing on Yield of Maize (*Zea mays* L.) and Artemisia (*Artemisia annua* L.) intercrops in a Sub-humid tropical ecozone, Maseno - Western Kenya
9. George K'otuto (**Graduated 2013**). internal examination of PhD thesis "Effects of Agro-ecosystems on the Carbon Dioxide Exchange and Carbon Storage in the Herbaceous Layer of a Moist Savannah Ecosystem".

Faculty Representative for Post Graduate Oral Examinations

1. Silas Cheruiyot Lagat. 2011. Faculty representative during examination of thesis titled "Adoption, desorption, leaching and field dissipation kinetics of herbicide metribuzin in different tropical soils and their relationships to physicochemical factors"
2. Sylvia A. Opiyo. 2011. Faculty representative during examination of thesis titled "Development of multiple PCR techniques for simultaneous detection of sweet potato virus and valuation of medicinal plant extracts for antimicrobial activity against crop pathogens.

External Examination

MSc

1. **Nyabinda N.O. AGR/PGS/08/03. Moi University.** Effect of cane trash; filter mud and farmyard manure on the growth and yield of smallholder seed cane in Western Kenya.
2. **Geoffrey Kimutai. (AGR/PGS/05/10). University of Eldoret (2013).** Soil Fertility and *Striga hermonthica* management using nitrogen fertilizer and host plant resistance in western Kenya".
3. **Wycliff Sunda (AGR/PGS/06/11). University of Eldoret (2013).** Integrating *Striga* management strategies for maize production improvement in western Kenya".
4. **Florah K. Kirirah (A56/73543/2012). University of Nairobi (2013).** Reduction of *Striga hermonthica* parasitism and effects of maize yield by intercropping with green grams.
5. **Janet K. Ogega (AGR/PGS/03/09). University of Eldoret (2014).** Improving groundnut and maize yields by enhancing biological nitrogen fixation in acid soils of western Kenya.
6. **Geoffrey Kimutai (AGR/PGS/05/10). University of Eldoret (2013).** Soil Fertility and *Striga hermonthica* management using nitrogen fertilizer and host plant resistance in western Kenya".
7. **Namutebi Vivian (2010/HD02/1514U) Makerere University (2014).** Influence of cereal - Legume intercropping on *Striga (Striga hermonthica* Del. Benth) and Maize grain yield in Eastern Uganda.
8. **David Ogola Kade Amadi University of Eldoret (2014).** Manipulation of Cultivar Traits and Herbicide Application Rates as Weed Management Strategies in Wheat (*Triticum aestivum* L.)" (AGR/PGC/21/10)
9. **Mr. George Omoto, University of Eldoret (2014).** Influence of row spacing, season,

cultivar and site on performance of sugarcane (*Saccharum spp*) in western Kenya” (AGR/DPHIL/03/2009).

PhD

1. **George Omoto** (AGR/DPHIL/03/2009). **University of Eldoret (2014)**. Influence of row spacing, season, cultivar and site on performance of sugarcane (*Saccharum spp*) in western Kenya.
2. **Mr. David Mbakaya University of Eldoret (2015)**. Effects of Agricultural Lime and Fertilizers on Maize Yield and Striga Growth in Acid Soils of Kakamega and Siaya Counties-Western Kenya” (AGR/DPHIL/05/2009).

Publications.

1. **Gacheru, E.N., G.M.Kamau, H.M.Saha, G.D.Odhiambo, and M.K. O'Neill. 1992.** Effect of land preparation and weeding on maize (*zea mays*) grain yield in the coastal region of Kenya. *International Journal of Pest Management* 39:57-60.
2. **Odhiambo, G.D. and J.K. Ransom. 1993.** Effect of dicamba on the control of *Striga hermonthica* in maize in western Kenya. *African Crop Science Journal*. Vol.1 (2):105-110.
3. **Kamau G.M., H.M.Saha, E.N.Gacheru, G.D.Odhiambo, and J.K. Ransom. 1994.** Effect of time and method of placement of nitrogen on maize grain yield in the coastal region of Kenya. *African Crop Science Conference Proceedings*, Vol.1 pp. 134-136.
4. **Ransom, J.K. and G.D. Odhiambo. 1995.** Effect of Corn(*Zea mays*) genotypes which vary in maturity length on *Striga hermonthica* parasitism. *Weed Technology*. 9:63-67.
5. **O.O. Babalola, Osir E.O., Sanni A.I., Odhiambo G.D., and Bulimo W.D (2003)** Amplification of 1-amino-cyclopropane-1-carboxylic (ACC) deaminase from plant growth promoting rhizobacteria in *Striga*-infested soil. *African Journal of Biotechnology* 2(6): 157-160. <http://www.academicjournals.org/AJB>.
6. **O.O. Babalola, Sanni A.I., and Odhiambo G.D. (2004)** Isolation of rhizobacteria associated with maize and assessment of their potential for use in *Striga hermonthica* (Del.) Benth. suicidal germination. *Journal of Tropical Microbiology and Biotechnology* 3 (1): 64 – 70.
7. **Babalola O.O, Sanni A.I, Odhiambo G.D., and Baldwyn T. (2006)** Plant growth-promoting rhizobacteria do not pose any deleterious effect on cowpea and detectable amounts of ethylene are produced. *World Journal of Microbiology and Biotechnology* (Netherlands). DOI: 10.1007/s11274-006-9290-6.
8. **Manyong V.M., Arega D. Alene, G. D. Odhiambo, H.D. Mignouna, M. Bokanga, G. Omany, and S.J. Nindi. 2007.** Livelihood strategies of resource-poor farmers in *Striga*-infested areas of western Kenya. Paper presented at the African Association of Agricultural Economists conference in August 2007, Accra, Ghana.
9. **Babalola, O.O and G.D.Odhiambo. 2007.** *Klebsiella oxytoca* ‘10mkr7’ stimulates *Striga* suicidal germination in *Zea mays*., *Journal of Tropical Microbiology and Biotechnology*. (2) 13-19.
10. **Vanlauwe, B. F. Kanampiu, G.D. Odhiambo, H. De Groot, L.J. Wadhams and Z.R. Khan. 2008.** Integrated management of *Striga hermonthica*, stem borers, and declining soil fertility in western Kenya. *Field Crops Research* 107 (2008) 102-115.
11. **Arega D.A., Manyong’ V.M., Omany G., Mignouna H.D., Bokanga M., Odhiambo G.D. 2008.** Economic Efficiency and Supply Response of Women as Farm Managers: Comparative Evidence from Western Kenya. *World Development*

Vol. 36 (7):1247-1260

12. Arega D.A., Manyong' V.M., Omany G., Mignouna H.D., Bokanga M., **Odhiambo G.D. 2008.** Smallholder market participation under transactions costs: Maize supply and fertilizer demand in Kenya. *Journal of Food Policy* 33:318-328
13. H. De Groote, B. Vanlauwe, Rutto, E., **G. Odhiambo**, F. Kanampiu, , Z. Khan, **2009.** Economic analysis of different options in integrated pest and soil fertility management in maize cropping systems of western Kenya. *Agricultural Economics* 41(2010) 471-482
14. H. De Groote, Rutto, E., **G. Odhiambo**, F. Kanampiu, , Z. Khan, Coe R. and B. Vanlauwe., **2009.** Participatory evaluation of integrated pest and soil fertility management options using categorical data analysis. *Agricultural Systems* 103(2010) 233-244
15. Johnson K. K., S. T. Gichuki, M. M. Dida and **G. D. Odhiambo. 2009.** Multi-locational On - Farm Evaluation of Sweet potato varieties for commercial and domestic use. *EAAFJ Vol. 75(1&2): 127-138.*
16. Obongoya, B.O., Wagai, S.O. and **G. Odhiambo. 2009.** Fungitoxic Properties of four crude plant extracts on *Fusarium Oxysporium* SCHL.F. SP PHASEOLI. *African Journal of Food, Agriculture, Nutrition and Development. Vol. (9) 8:1652-1666.*
17. Obongoya, B.O., Wagai, S.O. and **G. Odhiambo. 2010.** Phytotoxic effect of selected crude plant extracts on soil-brne fungi of common bean. *African Crop Science Journal Vol. 18, No. 1-15-22*
18. Kwach J. K.; **Odhiambo, G. D.**; Dida, M. M.; Gichuki, S. T. **2010.** Participatory consumer evaluation of twelve sweetpotato varieties in Kenya. *African Journal of Hort. Sci. (2010) 3:81-97)*
19. Achieng, J. O., Ouma, **G., Odhiambo** and Muyekho, **2010.** F. Effect of farmyard manure and inorganic fertilizers on maize production on Alfisols and Ultisols in Kakamega, western Kenya *Agric. Biol. J.N. Am. 2010 1(4): 430-439*
20. Achieng, J. O., Ouma, **G., Odhiambo, G.** and Muyekho, F. **2010.** Effect of tithonia diversifolia and inorganic fertilizers on maize yield on Alfisols and Ultisols of western Kenya. 2010. *Agric. Biol. J. N. Am., Vol 1(5): 740-747*
21. Joel Ransom, Fred Kanampiu, Jonathan Gressel, Hugo De Groote, Michael Burnet, and **George Odhiambo 2012.** Herbicide Applied to Imidazolinone Resistant-Maize Seed as a *Striga* Control Option for Small-Scale African Farmers. *Weed Science, 60(2):283-289.*
22. Ogola A. H., **Odhiambo G.D**, Okalebo J.R. and Muyekho F.N. **2012.** Influence of Phosphorus on Selected Desmodium Growth And Nodulation Parameters. *Journal of Agric. and Biological Sciences. Vol. 7(5); 1-9.*
23. Chumba R.B.K, Owuor B, Mwai G.N., **Odhiambo G.D.**, Netondo G.W. **2012.** Yield advantage of maize and Artemisia intercrops in a sub-humid eco-zone of Western Kenya. *J. Biol. & Env. Sci. Vol 2(12): 41-55.*

24. Chumba, RKB, Owuor B, **Odhiambo G.D.** and Netondo GW. 2012. Competitive and Complimentary effects of *Artemisia (Artemisia annua L.)* and Maize (*Zea mays L.*) intercropping in a sub-humid Ecozone of Maseno, Kenya. *E. Afr. Agric. For. J.* 78(1):5
25. Ogola A.H., **Odhiambo G.D.**, Okalebo R. and Muyekho. 2012. Effect Of Phosphorus And Desmodium Root Exudates On *S.Hermonthica (Del.) Benth* Seed Germination And Viability. *E. Afr. Agric. For. J.* 78(1):89-96
26. **Odhiambo G. D., Maraga J. N., Oyunge D. O., Aloit C.** 2013. Farmers Perception and its Influence on Adoption of *Striga* Management Technologies in Western Kenya. *Journal of Agricultural Economics and Development.* Vol. 2(5): 175-183.
27. **Unachukwu Nn, Menkir A, Rabbi Iy, Oluoch M, Muranaka S, Elzein A, Odhiambo G, Farombi Eo & Gedil M (2017).** Genetic diversity and population structure of *Striga hermonthica* populations from Kenya and Nigeria. *Weed Research* 57, 293–302.

Chapter in a Book

Ransom, J.K. and **G.D. Odhiambo.** Babiker A.G. 2007. Integrating crop Management Practices for Striga Control. Chapter 16, pp. 213-227 In Integrating New technologies for Striga control: towards ending the witch-hunt/edited by Gebisa Ejeta and Jonathan Gressel. Publishers World Scientific Publishing Co. Pte. Ltd (SB615, W58158-2007. 5 Toh Tuck Link-Singapore, 596224.

Publications in non-referred journals.

1. **McVay K.A., J.A. Stecker, D.D. Buchholz, and G.D. Odhiambo.** 1991. Nitrogen sources and placement under no-till corn. *Agronomy Abstracts* p. 361.
2. **Odhiambo,G.D. and J.K. Ransom.** 1991. Effect of nitrogen and cowpea intercropping on the development of *Striga* in maize. *Proceedings of the East African Weed Science Society.* pp. 30-32
3. **Ransom, J.K. and G.D. Odhiambo.** 1991. Early maturing genotypes avoid *Striga* parasitism. *Agronomy Abstracts.* p.65.
4. **Odhiambo,G.D. and J.K. Ransom.** 1992. Components of an integrated *Striga* control program. *International Crop Science Congress Abstracts* p. 71., Ames, Iowa, USA.
5. **Ransom, J.K. and G.D. Odhiambo.** 1991. Early maturing genotypes avoid *Striga* parasitism. *Agronomy Abstracts.* p.65.
6. **Odhiambo,G.D. and J.K. Ransom.** 1992. Components of an integrated *Striga* control program. *International Crop Science Congress Abstracts* p. 71., Ames, Iowa, USA.
7. **Odhiambo,G.D. and J.K. Ransom.** 1993. Preliminary evaluation of long-term effects of trap cropping and maize management on *Striga*. In: A.H.Pieterse, J.C.A. Verkleij and S.J.ter Borg, *Biology and management of Orobanche*, Proceedings of the Third International Workshop on *Orobanche* and related *Striga* research. Amsterdam, The Netherlands, Royal Tropical Institute, pp. 505-512.
8. **Ransom, J.K. and G.D. Odhiambo.** 1993. Long-term effects of fertility and hand-weeding on *Striga* in maize. In:A.H.Pieterse, J.C.A. Verkleij and S.J.ter Borg. *Biology and management of Orobanche*, Proceedings of the Third International Workshop on *Orobanche* and related *Striga* research. Amsterdam, The Netherlands, Royal Tropical Institute, pp. 513-519.

- 9. Baltus, P.C.W., J.K.Ransom, G.D.Odhiambo, W.S.Egbers, S.J. ter Borg, J.A.C.Verkleij and A.H.Pieterse. 1993.** A comparative study on the defence mechanism(s) of the maize variety 'Katumani' against *Striga hermonthica* under field conditions in Kenya. In: A.H.Pieterse, J.C.A. Verkleij and S.J.ter Borg, Biology and management of Orobanche, Proceedings of the Third International Workshop on *Orobanche* and related *Striga* research. Amsterdam, The Netherlands, Royal Tropical Institute, pp. 373-381.
- 10. Kamau G.M., E.N.Gacheru, H.M.Saha, G.D.Odhiambo, and J.K. Ransom. 1993.** Effect of nitrogen and weeding treatments on maize grain yields in the coastal region of Kenya. Farrell, G, J.M. Onsando and N. Njeru eds. Proceedings of the 14th Biennial Weed Science Society for Eastern Africa Conference, October 1993. Arusha, Tanzania. pp. 22-27.
- 11. Ransom, J.K. and G.D. Odhiambo. 1992.** Long-term effects of fertility, stover removal and hand-weeding on *Striga* control in maize. African Crop Science Conference Proceedings, Vol.1 pp. 217-219.
- 12. Odhiambo, G.D. and J.K. Ransom. 1994.** Long-term strategies for *Striga* control. In: Jewell D.C., S.R. Waddington, J.K. Ransom, and K.V. Pixley (eds). 1995. Maize Research for Stress Environments. Proceedings of the Fourth Eastern and Southern Africa Regional Maize Conference, held at Harare, Zimbabwe, 28 March - 1 April 1994. Mexico D.F. CIMMYT. pp 263-266.
- 13. Odhiambo, G.D. and J.K. Ransom. 1996.** Effect of continuous cropping with trap crops and maize under varying management systems on the restoration of land infested with *Striga hermonthica*. In: Moreno, M.T., J.I. Cubero, D. Berner, D. Joel, L.J. Musselman, and C. Parker (eds). Advances in parasitic Plant Research. Proceedings Sixth International Parasitic Weed Symposium, Cordoba, Spain, April 16-18, 1996. pp. 835-841.
- 14. Ransom, J.K., G.D. Odhiambo, R.E. Eplee and A.O. Diallo. 1996.** Estimating from fields of the phytotoxic effects of *Striga* spp. on maize. In: Moreno, M.T., J.I. Cubero, D. Berner, D. Joel, L.J. Musselman, and C. Parker (eds). Advances in parasitic Plant Research. Proceedings Sixth International Parasitic Weed Symposium, Cordoba, Spain, April 16-18, 1996. pp. 327-333.
- 15. Pieterse A.H., J.C.A. Verkleij, N.G. Den Hollander, G.D. Odhiambo and J.K. Ransom. 1996.** Germination and viability of *Striga hermonthica* seeds in Western Kenya in the course of the long rainy season. In: Moreno, M.T., J.I. Cubero, D. Berner, D. Joel, L.J. Musselman, and C. Parker (eds). Advances in parasitic Plant Research. Proceedings Sixth International Parasitic Weed Symposium, Cordoba, Spain, April 16-18, 1996. pp. 457-464.
- 16. Abayo, G.O., J.K. Ransom, J. Gressel, and G.D. Odhiambo. 1996.** *Striga hermonthica* control with acetolactase synthase inhibiting herbicides applied to maize seed with target-site resistance. In: Moreno, M.T., J.I. Cubero, D. Berner, D. Joel, L.J. Musselman, and C. Parker (eds). Advances in parasitic Plant Research. Proceedings Sixth International Parasitic Weed Symposium, Cordoba, Spain, April 16-18, 1996. pp. 763-768.
- 17. Pieterse A.H., Schoenmakers, F., Scheppers, P., Yehouenou, A., Ransom, J.K., Odhiambo, G.D., Egbers, P.C.W., Baltus, P.C.W., ter Boeg, S.J., and Verkleij, J.A.C. 1993.** A comparative study of the parasitic weed *Striga hermonthica* (Del.) Benth. regarding seed dormancy and sowing date of the host crop in Benin and Kenya. In A.H. Pieterse (ed.), Studies on the Biology and ecology of the parasitic weed *Striga* in connection with integrated control schemes. Royal Tropical Institute, February 1993: 49-65.
- 18. Ariga, E.S., J.K. Ransom, G.D. Odhiambo, G. Abayo and D.K. Ndung'u. 1997.** Potential of using cotton and other trap crops for *Striga hermonthica* management in cereals in Kenya. Proceedings of the 16th East African Biennial Weed Science Conference, Kampala, Uganda, September 1997. Pp. 247-253.
- 19. Ransom, J.K., G.D. Odhiambo, and J. Gressel, 1995.** Seed dressing corn with

imidazolinone herbicide to control *Striga hermonthica* (Del.) Benth. Weed Science Society of America. Abstracts 35:15.

20. Grimanelli, D., F. Kanampiu, G.Odhiambo, P.O. Mbogo and D.A. Hoisington. 1999. Identification of genes for tolerance to *Striga* in maize using transposable elements. B.I.G. Haussmann, D.E. Hess, M.L. Koyama, L. Grivet, H.F.W. Rattunde, and H.H. Geiger (eds). 2000. Breeding for *Striga* resistance in cereals. Proceedings of a workshop held at IITA, Ibadan, Nigeria, from 18-20 August 1999. Margraf Verlag, Weikersheim, Germany.

21. Odhiambo, G.D. 2000. Progress in *Striga hermonthica* control in Eastern Africa. Proceedings of the 3rd International Weed Science Society Congress (IWSC) held at Foz Do Iguassu, Brazil from 6-11 June 2000. Abstracts 261:540.

22. Babalola O.O, Odhiambo G.D, and Sanni A. I. 2001 Study of the synergistic effects of bacteria isolates 8mr5, 4mks8 and 10mkr7 on *Striga hermonthica*. 18th Weed Science Society of Eastern Africa (WSSEA) 30th October to 2nd November 2001. Kenya Agricultural Research Institute (KARI) Headquarters, Nairobi, Kenya.

23. Babalola O.O., Osir E.O., Sanni A. I. and Odhiambo G.D. 2001. Characterization Of Plant-Associated Bacteria Species. IUBMB/SASBMB special meeting on The Biochemical and Molecular Basis of Disease. 19-23 November 2001. Baxter theatre, Rondebosch, Cape Town, South Africa.

24. Babalola O.O., Osir E.O., Sanni A.I., Torto B., and Odhiambo G.D. 2002. Ethylene-forming bacteria - a means to an end in *Striga hermonthica* control. Page 3. In: Christine Silvy (ed.) The role of genetics and evolution in biological control. Abstracts of the Global International Symposium of the Organisation for Biological Control of Noxious Animals and Plants (IOBC), co-organized with C.I.L.B.A. 14-16 October, 2002. Montpellier, France.

25. Odhiambo, G.D. 1999. *Striga* research activities at KARI, Kenya. B.I.G. Haussmann, D.E. Hess, M.L. Koyama, L. Grivet, H.F.W. Rattunde, and H.H. Geiger (eds). 2000. Breeding for *Striga* resistance in cereals. Proceedings of a workshop held at IITA, Ibadan, Nigeria, from 18-20 August 1999. Margraf Verlag, Weikersheim, Germany. Pp.339.

26. Odhiambo, G.D., Ransom, J.K. and Sjogren, H. 2000. On-farm demonstration of the interaction between organic amendments and fertilizer N to control *Striga* and improve soil fertility for higher maize productivity. Proceedings of the 18th Soil Science Society of East Africa Conference, Mombasa, Kenya, 4th - 8th December, 2000.

27. Ayiecho, P.O., Nyabundi J.O., Odhiambo G.D., Omuony M.J. and Oteko, J.O. 2002. *Striga* control in maize using sesame as a trap crop. J. Nakitandwe, V. Ekiyar, I. Rwomushana, J. Nalukwago and G. Taulya. Eds. Proceedings of the 5th Regional Meeting of the Forum for Agricultural Resource Husbandry, 12th -16th August 2002, Entebbe, Uganda. Pp. 235-238.

28. Oteko, J.O. Ayiecho, P.O., Odhiambo G.D. 2002. Evaluation of different sesame genotypes for use as trap crop in an intercropping system for control of *Striga* weed in cereal production in western Kenya. J. Nakitandwe, V. Ekiyar, I. Rwomushana, J. Nalukwago and G. Taulya. Eds. Proceedings of the 5th Regional Meeting of the Forum for Agricultural Resource Husbandry, 12th -16th August 2002, Entebbe, Uganda. Pp. 256-259.

29. Omuony Mito J., Ayiecho, P.O., Odhiambo G.D. and Nyabundi J.O. 2002. Evaluation of different sesame cultivars for use as trap crops in rotation cropping system for control of *Striga* weed (*Striga hermonthica* (del.) benth.) in maize production in western Kenya. J. Nakitandwe, V. Ekiyar, I. Rwomushana, J. Nalukwago and G. Taulya. Eds. Proceedings of the 5th Regional Meeting of the Forum for Agricultural Resource

- Husbandry, 12th –16th August 2002, Entebbe, Uganda. Pp. 252-255
30. **Odhiambo G.D.** and P.L. Woomer. **2005.** *Striga* emergence and seed bank dynamics under different maize management practices in western Kenya. African Crop Science Conference Proceedings, Vol. 7. pp. 473-477.
 31. Woomer, P.L., J. Tungani, **G. Odhiambo** and F.M. Mwaura. **2005.** *Striga* management options in western Kenya. African Crop Science Conference Proceedings, Vol. 7. pp. 479-484.
 32. Okalebo, J.R., **G. Odhiambo**, P.L. Woomer, M. Omare, M.Thuita, M. Maina and A. Njoki. **2005.** A preliminary investigation of the effect of soil fertility on *Striga* weed infestation in maize fields in western Kenya. African Crop Science Conference Proceedings, Vol. 7. pp. 495-498.
 33. Rutto, E., H. De Groote, B. Vanlauwe, F. Kanampiu, **G. Odhiambo**, Z. Khan. **2005.** Farmers' perceptions and evaluation of integrated approaches to combat *Striga*, stemborer and soil fertility problems in western Kenya. Paper presented at the 7th African Crop Science Conference, Entebbe, Uganda, 5-9th December 2005
 34. Rutto, E., H. De Groote, B. Vanlauwe, F. Kanampiu, **G. Odhiambo**, Z. Khan. **2006.** Participatory farmer evaluation of integrated pest and soil management technologies using categorical data analysis. A paper presented at International Association of Agricultural Economics Conference, Gold Coast, Australia, 12-18th August 2006.
 35. Woomer, P.L., **Odhiambo G.D.** and Savala C.E.N. 2007. *Striga* infestation and management in East Africa. Proceedings of the 24th Soil Science Society of East Africa Conference, 26-30th November 2007, Embu, Kenya.
 36. Savala C.E.N., **Odhiambo G.D.** and Woomer, P.L 2007. Integrated *Striga* management in Kenya.
 37. Woomer, P.L., Bokanga, M.and **Odhiambo G.D.** 2008. *Striga* management and the African Farmer. Outlook on AGRICULTURE. Vol. 37 No. 4. Pp. 1-6.
 38. **Odhiambo, G. D**, Kwach J. K.; Dida, M. M.; Gichuki, S. T. **2009.** Effect of diseases and pests on dry matter yield of improved sweetpotato varieties in western Paper presented at the 9th Horticultural Association of Kenya Conference, 2nd – 5th December 2009, Snowcrest Hotel, Arusha, Tanzania. Book of abstracts, pp17.
 39. Kwach J. K., **Odhiambo, G. D.**; Dida, M. M, Gichuki, S. T. **2009.** Participatory selection of sweetpotato [*Ipomoea batatas* (L.) Lam.] cultivars using Mother and Baby trial in western Kenya. Paper presented at the All Africa Horticultural Congress, 31st August -3rd September 2001, Safari Park Hotel, Nairobi, Kenya.
 40. Musyimi,D,**Odhiambo,G.D** and Ouma, G.(2008) Weed control Strategies in Organically farmed fruits Paper Presented at 16th Organic Fruit Congress,16-20thJune, Modena, Italy
 41. Achieng, J. O., Ouma, G., and Odhiambo, G. 2012. Use of integrated nutrient management in Mollic Nitisols to enhance maize production among smallholder farmers in western Kenya. *In: Role of Science and Technology in Devolved Governance and New Constitutional Dispensation in Kenya.* Bondo University College Conference, Bondo, Nov 20-23, 2012 (In Press).
 42. Achieng, J. O., Ouma, G., and Odhiambo, G. 2012. Use of organic inputs in management of acidic soils to enhance maize production among smallholder farmers in western Kenya. *In: Role of Science and Technology in Devolved Governance and*

- New Constitutional Dispensation in Kenya. Bondo University College Conference, Bondo, Nov 20-23, 2012 (In Press).
43. Achieng, J. O., Ouma, G., and Odhiambo, G. 2012. Use of integrated nutrient management in Alfisols and Ultisols to enhance maize-bean production among smallholder farmers in western Kenya. *In: Integrated Soil Fertility Management in Africa: From Microbes to Market. Conference Information, Program and Abstract. An International Conference, Nairobi, 22-26 October, 2012. (In Press).*
 44. **Odhiambo G.D.**, Ogola A.H. , Okalebo R. and Muyekho F. **2012.** Interaction between phosphorus and desmodium on *Striga hermonthica* (Del.) Benth incidence and maize yield in western Kenya. *Proceedings of the 6th International Weed Science Congress. Abstracts p. 104. 17-22 June 2012, Hangzhou, China.*

Papers presented to workshops, seminars and conferences with no proceedings.

1. **Odhiambo, G.D.**, J. Agunda, A. Oswald and D. Friesen. **2000.** Development and diffusion of integrated *Striga hermonthica* control practices for small-scale farmers in western Kenya. Paper presented at the 3rd International Seminar and small grants workshop of the Participatory research and gender analysis (PRGA) held in Nairobi, Kenya from 6-11 November, 2000.
2. **Odhiambo, G.D. 1987.** Soil fertility and its management under a maize-based production system-past work, current research and future considerations for the coastal region of Kenya. Maize Agronomy National Workshop, Silver Springs Hotel, Nairobi, Kenya, Feb. 16th –19th 1987. (Sponsored By Cimmyt).
3. **Odhiambo, G.D. 1987.** Maize plant density and spatial arrangement-past work, current research and future considerations for coastal region of Kenya. Maize Agronomy National Workshop At Silver Springs Hotel, Nairobi, Kenya, Feb. 16th –19th 1987.
5. **Odhiambo, G.D. 1986.** Report on diagnostic survey carried out in Chonyi Location, Kilifi District, Kenya presented at Safari Park Hotel, Nairobi for two weeks in 1986 and sponsored by Cimmyt and Kenya Government.
6. **Odhiambo, G.D. 1986.** Evaluation and review of current on-farm research program at Chonyi Location, Kilifi District, Kenya presented at Green Hills Hotel, Nyeri for one week in 1986 and sponsored by Cimmyt and Kenya Government.

Production of final technical report on problem solving project based on community study.

- 2003.** Integrated *Striga* (*Striga* sp.) management approaches: experiences with *S. hermonthica* from western Kenya. Eva Gacheru, **George Odhiambo**, F. Kanampiu, Bashir Jama and Dickens Nyagol.
- June 2005.** Interim technical report on the project “*Striga* control in western Kenya: Raising awareness, containing and reducing the infestation and developing strategies for eradication. pg. 14-15.
- December 2005.** Second quarter technical report on the project “*Striga* control in western Kenya: Raising awareness, containing and reducing the infestation and developing strategies for eradication. pg. 14-15.
- June 2006.** Third quarter technical report on the project “*Striga* control in western Kenya: Raising awareness, containing and reducing the infestation and developing strategies for eradication. pg. 12.
- 2000-2005 Perspectives on pests II. Achievements of research under UK Department for International Development Crop Protection Programme. report on project entitled “Integrated Pest and soil management to combat *Striga*, stemborers and declining soil fertility in maize. Zeyaur Khan, Hugo De Groote, Fred Kanampiu, Joseph Kikafunda,**

Dickens Nyagol, **George Odhiambo**, Esther Rutto Ignath Rwiza, Bernard Vanlauwe. pg. 79-81

Involvement in Community Initiatives

1. Chairman of Board of Management, Rapogi Secondary School from 2005 to 2012
2. Member, Board of Management, Rapogi Secondary School from 2005 to 2015
3. Patron, Rapogi Primary School from January 2003 to date.
4. Member of Kisumu Rural Constituency Food Security Committee from 10th April 2006 to date and presented a paper entitled “Analysis of Food Security in Kisumu Rural of Nyanza Province” during the workshop on Food Security as a measure of independence to democratic choices in Kisumu Rural Societies: The Case for Kisumu Rural Constituency organized at Kit Mikayi on the 10th April 2006.