Dr Pia Addison

My research is focussed on integrated pest management (IPM) within the fruit industries of, primarily, the Western Cape Province. I am particularly interested in the morphology and taxonomy, basic biology and ecology of major fruit pests and their natural enemies. This research forms the basis of more applied projects in our Department, which aim to enable fruit producers to grow pesticide-free fruit by using alternate, area-wide management strategies. Specific fields of interest include habitat management in vineyards and biological control. My current projects include: morphology, taxonomy and ecology of moth pests; fruit fly taxonomy and ecology; taxonomy of white grubs in sugar cane (in collaboration with SASRI). Specific pests that interest me include: Linepithema humile, Anoplolepis spp., Crematogaster peringueyi, Planococcus ficus (and associated mealybug parasitoids), Anagyrus spp., Ceratitis capitata and C. rosa, Thaumatotibia leucotreta and other tortricid pests, Ectomyelois ceratoniae.

Affiliations

- Entomological Society of southern Africa (EntSoc)
- South African Society for Enology and Viticulture (SASEV)
- Assistant Editor for: *African Entomology* and
- Assistant Editor: *South African Journal for Enology and Viticulture*
- Member of the Integrated Pest Management (IPM) group, Western Cape.

Publications

SCIENTIFIC PUBLICATIONS

1. MUDAVANHU, P., **ADDISON, P**., PRINGLE, KL. 2011. Monitoring and action threshold determination for the obscure mealybug *Pseudococcus viburni* (Signoret) (Hemiptera: Pseudococcidae) using pheromone-baited traps. *Crop Protection* 30: 919 – 924.
2. NYAMUKONDIWA, C, **ADDISON, P**. 2011. Preference of foraging ants (Hymenoptera: Formicidae) for bait toxicants in South African vineyards. *Crop Protection 30: 1034 – 1038*.
3. MGOCHEKI, N & **ADDISON, P**. 2010. Spatial distribution of ants (Hymenoptera: Formicidae), vine mealybugs and mealybug parasitoids in vineyards. *Journal of Applied Entomology* 134: 285 – 295.
4. MGOCHEKI, N & **ADDISON, P**. 2009. Effect of contact pesticides on vine mealybug parasitoids, *Anagyrus sp*. near *pseudococci* (Girault) and *Coccidoxenoides perminutus* (Timberlake) (Hymenoptera: Encyrtidae). *South African Journal of Enology and Viticulture* 30: 110 – 116.
5. MGOCHEKI, N & **ADDISON, P**. 2009. Interference of ants (Hymenoptera: Formicidae) with biological control of the vine mealybug *Planococcus ficus* (Signoret) (Hemiptera: Pseudococcidae). *Biological Control*. 49: 180 – 185.

6. MGOCHEKI, N & **ADDISON, P.** 2009. Incorporating sampling precision into an action threshold for monitoring ant (Hymenoptera: Formicidae) population levels in vineyards. *Crop Protection* 28: 257 – 263.
7. JOHNSON, SA & **ADDISON, P**. 2008. A survey of the grain chinch bug, *Macchiademus diplopterus* (Distant) (Hemiptera: Lygaeidae), in deciduous fruit orchards in the Western Cape, South Africa. *African Entomology* 16: 76 – 85.
8. **ADDISON, P** & FOURIE, JC. 2008. Cover Crop Management in Vineyards of the Lower Orange River Region, South Africa: 2. Effect on Plant Parasitic Nematodes. *South African Journal of Enology and Viticulture* 29 (1): 26 – 32.
9. **ADDISON, P**. & SAMWAYS, M.J. 2006. Surrogate habitats demonstrate the invasion potential of the African pugnacious ant. *Biodiversity and Conservation* 15: 411 - 428.
10. **ADDISON, P**. 2002. Chemical stem barriers for the control of ants (Hymenoptera: Formicidae) in vineyards. *South African Journal of Enology and Viticulture* 23 (1): 1 – 8.
11. **ADDISON, P**. & SAMWAYS, M.J. 2000. A survey of ants (Hymenoptera: Formicidae) foraging in Western Cape vineyards of South Africa. *African Entomology* 8 (2): 251 – 260.

PUBLISHED CONGRESS PROCEEDINGS

ADDISON, P. 2005. Post-harvest control of the grain chinch bug *Macchiademus diplopterus* (Heteroptera: Lygaiedae) on pears in the Western Cape Province, South Africa. (ISHS) *Acta Horticulturae* 671: 549 – 554.

POPULAR PUBLICATIONS

1. **ADDISON, P**. & MGOCHECKI, N. 2010. Improving ant management in vineyards: How damaging are they and when should they be controlled? *South African Fruit Journal* 9 (2):30 – 31.
2. MANRAKHAN, A. & **ADDISON, P.** 2007. Monitoring Mediterranean fruit fly and Natal fruit fly in the Western Cape, South Africa. *South African Fruit Journal* 6 (3): 18 – 20.
3. **ADDISON, P**. 2004. Seasonal occurrence and monitoring of grain chinch bug on pears. *South African Fruit Journal*, Oct/Nov: 16 – 21.
4. **ADDISON, P.** 2001. Ants foraging in vineyards in the Western Cape Province. *Wynboer* No 141: 95 – 98.
5. **UECKERMANN, P.** & HUGO, H., 1999. The importance of soil and bud analyses for vineyard and orchard pests in integrated pest management. *Wynboer Tegnies*, October, 49 –50.
6. **UECKERMANN, P**. & HUGO, H. 1999. The importance of soil and bud analyses for vineyard and orchard pests in integrated pest management. *Deciduous Fruit Grower* 49 (7): 10 – 11.
7. **UECKERMANN, P.** 1998. Ant control in vineyards. *Wynboer Tegnies* 105: 8-9.