

**Top Achievers in 2004 HSC**

**NSWAAT:**

# *Congratulations to the top student achievers in the 2004 HSC for:*

- *2 Unit Agriculture*
- *Agriculture Research Project*
- *2 Unit Primary Industries*

# *Congratulations & a special mention to the students' teachers & their schools.*

# *The NSWAAT presented each achiever with a trophy & certificate in recognition of their fine achievement.*

**Charles Mullarvey Awards**



**Top Student: 2 Unit Agriculture**

***Margaret Wing Yan Li***  
***James Ruse Agricultural High School***

**Top Student: Research Project**  
**2 Unit Agriculture**

***Shelley Piper***  
***Calrossy School***



**Top Student: Primary Industries**  
**2 Unit**

***Alexander Burgess Buxton***  
***Hurlstone Agricultural High School***



***Top Student: 2 Unit Agriculture 2004 HSC***

***Margaret Wing Yan Li***

***James Ruse Agricultural High School***

***A Little about Margaret....***

^ The top student in 2 Unit HSC Agriculture 2004 was a year 11 student from James Ruse Agricultural High, Margaret (Maggie) Li.

^ Her teacher was the very able Gail Roberts.

^ Gail has now taught three students who have topped the state in Agriculture.

^ Maggie was born in Hong Kong and came to Australia when she was six. She came to James Ruse into year 7 from the Opportunity Class at Becroft Primary in 2000.

^ English is her second language as Cantonese is spoken at home.

^ Always a keen student of Agriculture Maggie has, from year 7, been in the top 15 students of her year group and in later years she has been in the top five.

^ She has enjoyed being involved with the chickens on the farm and eating the carrots she produced in the plot area.

^ Maggie chose to do the Plant and Animal Production electives rather than the research project for the HSC.

^ Currently she is in year 12 studying other subjects for the HSC. She completed HSC Information Technology in year 10.

^ Like many year 12 students she is unsure of where her career path lies after James Ruse; medicine, archaeology and architecture are possibilities. Whatever she finally chooses will be done to the highest standard.



***Congratulations Margaret***



***Gail Roberts(Ag.teacher); Margaret & Leile Brown(Hd. Teacher Agriculture)***

***Charles Mullavey Award***



**Charles Mullavey Memorial Award**

^ The Charles Mullavey Award is sponsored by the NSW Association of Agriculture Teachers.

^ It will be formally presented to Maggie at the James Ruse Awards Day in September where the school will recognise the achievements at the HSC of the class of 2004.

^ The presentation will be made by Charles Mullavey's daughter Robyn Borkwic.

^ The trophy is a copper art picture of draught horses pulling a mouldboard plough and is hung in the school whose student topped the state.

^ The student receives a smaller engraved trophy to keep for themselves.

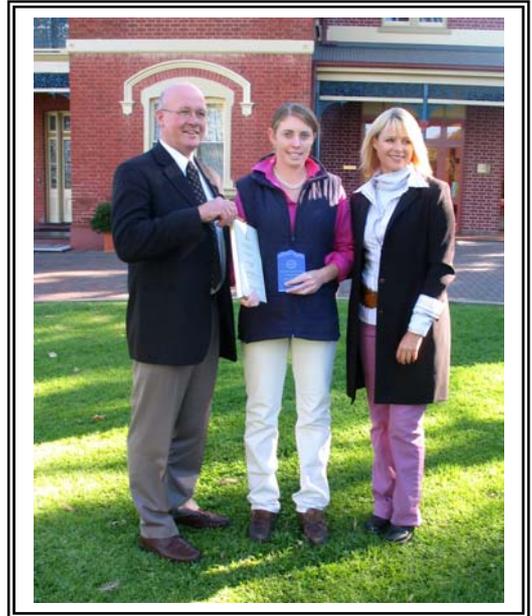


# Best Research Project in 2004 HSC

## Shelley Piper Calrossy School Via Tamworth

Tony Draper  
presents prize to  
Shelley Piper for  
the best  
Agriculture  
project in the HSC  
2004.

Also included in  
the picture is  
Bronwyn Nielsen;  
Shelley's,  
Agriculture  
teacher.



### **- PRESENTATION TO SHELLEY -**

- N.S.W. Association of Agriculture Teachers acknowledged Calrossy student, Shelley Piper with an award for achieving top position in the state in 2004 for her Agriculture Project. Shelley was presented with her award by local Member of Parliament, Mr Peter Draper, at a special ceremony at Calrossy School on Wednesday 1<sup>st</sup> June 2005.

### **- SHELLEYS PROJECT -**

- Shelleys' project involved investigating and comparing heliothis and beneficial insect populations in a genetically modified (Bt cotton) and conventional cotton crop. The project, whilst challenging, allowed Shelley the opportunity to develop skills in practical trial work, independent research, report formatting, data analysis and also enabled her to develop communication skills and contacts across many diverse areas of the rural industry.

### **- SHELLEYS 2005 AG. STUDY -**

- Shelley is hoping to use the skills developed through this trial procedure whilst studying as a Bachelor of Rural Science student at the University of New England. The location of the university allows Shelley the opportunity to return home on a regular basis and help on the family's mixed farming property situated at Breeza. She is looking forward to completing the first year at university which is heavily science orientated and specialising in the many agricultural modules on offer in the years of study to come.

### **- AG. SUCCESSES FOR CALROSSY SCHOOL -**

- The majority of Shelley's Year 12 Agriculture class at Calrossy has been accepted into tertiary institution where they are also studying in areas of Agriculture and Science. Caitlin Warner is undertaking a course in Agricultural Science, U.N.E. whilst Kate Carrigan is enrolled in Agriculture/Law on the same campus. Another student, Emily Stearman was accepted into Veterinarian Science at Charles Sturt University, Wagga whilst Tony Jericho is undertaking an agriculture/environmental science course at Gatton, part of the University of Queensland. Kristy Rutherford from the same class has deferred her Pharmacy Course at Newcastle University for a year and other students in the year are involved in agriculture and or science related courses.

### **- CONGRATULATIONS TO SHELLEYS AG. TEACHER -**

- Mrs Bronwyn Nielsen said that it was a privilege to teach at a school like Calrossy where the girls are so interested in learning about the many facets of the Agriculture industry; it creates such a positive learning environment. We endeavour to expose girls to as many facets of the rural industry as possible with the support of local agriculture industries. It is also very rewarding to see students electing to pursue careers in the rural industry when they complete their final year at school Mrs Nielsen commented; as there are many and diverse career opportunities available to those that have a genuine interest in the rural industry.

Bronwyn Nielsen

**"TO DETERMINE IF  
BT COTTON CROPS  
SHOW A SIGNIFICANT CHANGE IN  
LEVELS OF  
*HELICOVERPA SP.*  
&  
BENEFICIAL INSECTS WHEN  
COMPARED TO THOSE WITHIN A  
CONVENTIONAL COTTON CROP"**

**SYNOPSIS**

This research was conducted on a cotton property on the Liverpool Plains, in New South Wales.

It was important to develop a research program that did not upset regular management of the cotton fields. It was arranged that the research could be conducted in conjunction with an independent agronomist who was monitoring cotton fields in this region throughout the growing season.

The main aim of this trial was to determine whether Bt cotton crops did or did not show significant change in the number of *Helicoverpa sp.* and beneficial insects when compared to those within a conventional cotton crop.

Insect populations from conventional, *Ingard* and *Bollgard* cotton crops were counted over various growth stages of the cotton to determine whether the presence of the Bt gene had a significant effect on cotton insect populations in particular.

**PEST: *Helicoverpa sp.***

- eggs
- very small larvae (1 – 1.5mm)
- large larva (40 – 50mm)

**BENEFICIALS:**

- Predatory Bugs
- Predatory Beetles
- Spiders
- Lacewings

The major findings of this trial were:

- There was no significant difference between the conventional, *Ingard* and *Bollgard* cotton in regard to *Helicoverpa sp.* eggs, very small larvae and large larva.
- A significant difference was found between the conventional, *Ingard* and *Bollgard* cotton in regard to beneficial insect populations. The research showed that the *Ingard* and *Bollgard* cotton supported significantly larger populations of beneficial insects when compared to the conventional cotton.

In Bt cotton, a population increase of beneficial insects that are predators of *Helicoverpa sp.* might be expected to correspond with a decrease in *Helicoverpa sp.* populations in Bt cotton crops when compared to conventional cotton. This correspondence was not observed as there was no significant difference in *Helicoverpa sp.* populations between the Bt and conventional crops. Beneficial insects may have significantly reduced secondary pests numbers throughout the investigation but their numbers were not monitored closely in this trial.

FIGURE. 1. A Ladybird found when counting beneficial insects.



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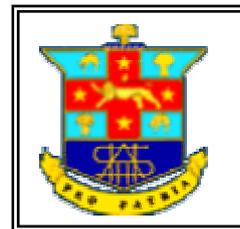
- Board of Studies
- Shelley Piper
- Calrossy School to reproduce this synopsis in its entirety.

# NSWAAAT acknowledges this permission.

# Alexander Burgess Buxton



## Hurlstone Agricultural High School



2004 ISU

### Where is Hurlstone?

- Hurlstone Agricultural High School is located in the South Western suburbs of Sydney and in many respects is unique in that it is a selective high school and also a boarding school.

### Resources at Hurlstone

- There are about 600 Day students and 300 Boarding students. The school is located on about 100 Hectares of land and because of its status as a Agricultural High school the school has an impressive range of Agricultural enterprises from a commercial dairy milking 40 cows each day, a barn yard laying system of over 300 poultry and a large range of other farm animal enterprises as well as a range of horticultural activities.
- This means that Hurlstone Primary Industries students were exposed to a large variety of enterprises and working situations within the school environment.

### VET at Hurlstone

- The school even though it is a selective high school which places a strong emphasis on academic achievement also recognizes the place of VET courses within the curriculum and at any time the school will have a number of students attending various courses usually run through the local TAFE system.

### Primary Industries at Hurlstone

- Primary Industries has a strong presence within the school and last years group was no exception with Alex being one of 17 students (14 boarders and 3 Day students) who attempted the 240 Hr Primary Industries course.

### Comments by John Houweling: Alex's PI Teacher

- I believe this is the largest number of Primary Industries students in the Sydney metropolitan area but I could be wrong. All of these students not only attempted the Primary Industries HSC course but also obtained their Chemical Users certificate and the Cert 11 in Agriculture.

### Students are attracted to P.I.

- All of the students were attracted to the course because it offered qualifications which were recognized across Australia as well as offering subjects that were practical. In Alex's case he hoped to enroll in a Horticulture course and decided that the Primary industries course would teach him some skills that he would find useful in his post school training (Alex is currently enrolled in a Horticulture Cert at Moss Vale TAFE)
- The ready access by the students to such a diverse range of agricultural activities within a school environment that encourages students to achieve there best I am sure helped Alex to achieve this excellent result in the HSC.

### Congratulations to John Houweling