

# **Conditions of licence - DIR 010/2001**

## **Bayer CropScience Pty Ltd – InVigor Canola**

### **PART 1**

#### **Persons covered by licence**

The persons covered by this licence are the licence holder and employees, agents or contractors of the licence holder and other persons who are, or have been, engaged to undertake any activity in relation to a GMO grown in a Location.

(Explanatory Note: Each person covered by this licence is a 'person covered by a GMO licence' for the purposes of the *Gene Technology Act 2000* (Cth)).

#### **Dealings authorised by licence**

This licence authorises the licence holder and persons covered by the licence to deal with the GMO subject to the limitations on dealing with the GMO that are contained in the conditions in this licence.

#### **Period covered by licence**

This licence remains in force until it is cancelled or surrendered. No dealings with the GMO are authorised during any period of suspension.

## PART 2: INTERPRETATION AND DEFINITIONS

Words and phrases used in this licence have the same meanings as they do in the *Gene Technology Act 2000* (Cth) and the Gene Technology Regulations 2001.

Words importing a gender include any other gender.

Words in the singular include the plural and words in the plural include the singular.

Words importing persons include a partnership and a body whether corporate or otherwise.

References to any statute or other legislation (whether primary or subordinate) is to a statute or other legislation of the Commonwealth of Australia as amended or replaced from time to time unless the contrary intention appears.

Where any word or phrase is given a defined meaning, any other part of speech or other grammatical form in respect of that word or phrase has a corresponding meaning.

In this licence:

**‘Brassica plants’** means the species listed in column I of the table at Table 1

**‘Brassica crops’** means any crop of *Brassica* plants or Canola (and includes commercial *Brassica* crops)

**‘Brassicaceous weeds’** means the species listed in columns II and III of the table at Table 1

**‘Burial site’** means a site at which the GMO or GM material from the GMO is destroyed by burial under at least 1 meter of soil

**‘Canola’** means plants of the species *Brassica napus*

**‘Clean’** (or **‘Cleaned’**), as the case requires, means:

- (a) in relation to a Location or other area (including a Pollen Trap, Monitoring Zone or Isolation Zone), the destruction of the GMO, Material from the GMO, Pollen Trap plants or Material from Pollen Trap plants in that Location or area, to the reasonable satisfaction of the Regulator; or
- (b) in relation to Equipment, the removal and destruction of the GMO and Material from the GMO, Pollen Trap plants or Material from Pollen Trap plants from the Equipment, to the reasonable satisfaction of the Regulator.

**‘Destroy’**, (or **‘Destroyed’** or **‘Destruction’**), as the case requires, means killed by one or more of the following methods:

- (a) stalk pulling; or
- (b) light tillage; or
- (c) burning; or
- (d) treatment with herbicide; or
- (e) slashing; or
- (f) mowing; or
- (g) hand weeding; or

- (h) burial under 1 metre of soil; or
- (i) grazing; or
- (j) a combination of the above.

*Note (1): 'As the case requires' has the effect that, depending on the circumstances, one or more of these techniques may not be appropriate. For example, in the case of killing the remains of harvest of the GMO, treatment of post harvest remains by herbicide would not be a sufficient mechanism.*

*Note (2): Where method (b) is adopted, this licence contains additional conditions relating to light tillage as a method for destruction.*

*Note (3): Where method (h) is adopted, this licence contains additional conditions relating to burial as a method for destruction.*

*Note (4): Where method (i) is adopted, this licence contains additional conditions relating to grazing as a method for destruction.*

**'Equipment'** includes harvesters, seeders, storage equipment, transport equipment (eg bags, containers, trucks), clothing and tools.

**'GM'** means genetically modified.

**'Isolation Zone'**, means, in respect of a Location, an area of land surrounding either the Location, or the Location's Pollen Trap (if the Location is surrounded by a Pollen Trap) that is known not to contain any *Brassica* crops when the GMO is planted at the Location.

**'Light tillage' or 'lightly tilled'** means the use of a technique to disturb the soil in an area so as not to bury plant material in the area to a depth of more than 50mm.

**'Location'** means an area of land where the GMO is planted and grown.

*Note: Generally, before the GMO is planted and grown in a field, this licence refers to the field as an area or place. After the GMO is planted in a field and while it is being grown, this licence refers to the field as a 'Location'.*

**'Material from Pollen Trap plants'** means seed, stubble, pollen or any other GM material (including parts of a plant) that is derived from or produced by Canola from a Pollen Trap.

**'Material from the GMO'** means GM seed, stubble, pollen or any other GM material (including part of a GMO) that is derived from or produced by the GMO.

**'Monitoring Zone'** means an area extending outwards by 50m in all directions from the outer edge of a Location, or the Location's Pollen Trap (if the Location is surrounded by a Pollen Trap).

**'OGTR'** means the Office of the Gene Technology Regulator.

**'Pollen Trap'** means an area of land, extending at least 15 metres in all directions from the outside edge of a Location, containing non-genetically modified Canola or genetically modified male sterile Canola that is grown in such a way as to reasonably promote a dense and vigorous growth and flowering of the non-genetically modified Canola at the same time as the GMO.

**'Pollen Trap plant'** means Canola from a Pollen Trap.

**'Post-harvest Monitoring Period'** means the period that any Location, Pollen Trap in respect of a Location, and Monitoring Zone in respect of a Location must be monitored after harvest or after destruction of the GMO, either prior to seed set or at maturity.

**‘Volunteer plants’** means progeny of the GMO or a Pollen Trap plant growing in the Location, its Pollen Trap, if any, or the Monitoring Zone for the Location, during the Post-harvest Monitoring Period.

## **PART 3: CONDITIONS OF LICENCE**

The licence holder and persons covered by this licence must comply with the conditions of this licence.

### **Section 1: General Conditions**

#### **Informing people of their obligations**

- 1.1 The licence holder must inform each person covered by this licence of the obligations imposed on them as a result of the conditions in this licence.
- 1.2 The licence holder must provide the Regulator, on the Regulator's written request, a signed statement from each person covered by this licence that the licence holder has informed the person of the conditions of this licence that apply to that person.

#### **Material Changes in circumstances**

- 2.1 The licence holder must immediately, by notice in writing, inform the Regulator of:
  - (a) any relevant conviction of the licence holder occurring after the commencement of this licence;
  - (b) any revocation or suspension of a licence or permit held by the licence holder under a law of the Commonwealth, a State or a foreign country, being a law relating to the health and safety of people or the environment;
  - (c) any event or circumstances occurring after the commencement of this licence that would affect the capacity of the holder of his licence to meet the conditions in it.

#### **Remaining an Accredited organisation**

- 3.1 The licence holder must, at all times, remain an accredited organisation and comply with any conditions of accreditation set out in the Guidelines for Accreditation of Organisations.

#### **Changes to details**

- 4.1 The licence holder must immediately notify the Regulator in writing if any of the contact details of the Project Supervisor change.

## **Section 2: Specific Conditions**

### **Locations and size of release – Winter plantings**

- 1.1 The GMO may be planted during Winter planting seasons. ‘Winter planting seasons’ means the between 1 March and 31 August in 2002, 2003 and 2004.
- 1.2 If the GMO is planted during Winter planting seasons, it must not be planted at areas outside the Shires of Ararat, Glenelg, Hindmarsh, Horsham, Moyne, Northern Grampians, Southern Grampians, Yarriambiack, Grant, Naracoorte/Lucindale, Wattle Range, Coolamon, Culcairn, Lockhart, Junee, Narrandera, Wagga Wagga, Beverly, Brookton, Goomalling, Quairading, Victoria Plains and Wongan-Ballidu.

*Note: The above Shires are located in Victoria, South Australia, New South Wales and Western Australia.*

- 1.3 If the GMO is planted during a Winter planting season, the maximum size of all land planted to the GMO in any single Winter planting season must not exceed 61 hectares.

*Note: This condition enables a total of 183 hectares of the GMO to be planted, cumulatively over 3 years.*

- 1.4 If the GMO is planted during a Winter planting season, the total number of areas that may be planted to the GMO in any single Winter planting season must not exceed 13.
- 1.5 If the GMO is planted during a Winter planting season, the maximum size of any single area planted to the GMO must not exceed 9 hectares.
- 1.6 If the GMO is planted it may be grown.

### **Locations and size of release – Summer plantings**

- 2.1 The GMO may be planted during Summer planting seasons. ‘Summer planting seasons’ means between 1 September and 28 February in 2002/03, 2003/04 and 2004/05.
- 2.2 If the GMO is planted during Summer planting seasons, it must not be planted at areas outside the Shires of Grant, Naracoorte/Lucindale, Wattle Range and Glenelg.

*Note: The above Shires are located in South Australia and Victoria.*

- 2.3 If the GMO is planted during a Summer planting season, the maximum size of all land planted to the GMO in any single Summer planting season must not exceed 45 hectares.

*Note: This condition enables a total of 135 hectares of the GMO to be planted, cumulatively over 3 years.*

- 2.4 If the GMO is planted during a Summer planting season, the total number of areas planted to the GMO in any single Summer planting season must not exceed 17.
- 2.5 If the GMO is planted during a Summer planting season, the maximum size of any single area planted to the GMO must not exceed 9 hectares.
- 2.6 If the GMO is planted it may be grown.

*Note: The summer and winter plantings of the GMO which may be undertaken between 2002 and 2004/5 are summarised in the Table below.*

| <i>Planting season</i>  | <i>Maximum area (total)</i> | <i>Maximum number of Locations</i> | <i>Maximum area per site</i> | <i>Earliest planting date</i> | <i>Final planting date</i> |
|-------------------------|-----------------------------|------------------------------------|------------------------------|-------------------------------|----------------------------|
| <i>Winter 2002</i>      | <i>61 hectares</i>          | <i>13 sites</i>                    | <i>9 hectares</i>            | <i>1 March 2002</i>           | <i>31 August 2002</i>      |
| <i>Summer 2002/2003</i> | <i>45 hectares</i>          | <i>17 sites</i>                    | <i>9 hectares</i>            | <i>1 September 2003</i>       | <i>28 February 2003</i>    |
| <i>Winter 2003</i>      | <i>61 hectares</i>          | <i>13 sites</i>                    | <i>9 hectares</i>            | <i>1 March 2003</i>           | <i>31 August 2003</i>      |
| <i>Summer 2003/2004</i> | <i>45 hectares</i>          | <i>17 sites</i>                    | <i>9 hectares</i>            | <i>1 September 2004</i>       | <i>28 February 2004</i>    |
| <i>Winter 2004</i>      | <i>61 hectares</i>          | <i>13 sites</i>                    | <i>9 hectares</i>            | <i>1 March 2004</i>           | <i>31 August 2004</i>      |
| <i>Summer 2004/2005</i> | <i>45 hectares</i>          | <i>17 sites</i>                    | <i>9 hectares</i>            | <i>1 September 2005</i>       | <i>28 February 2005</i>    |

### Site One

Season and Year: Winter 2002  
Area (hectares): 2  
Local Government Area (s): Horsham VIC  
Street Address / Directions: Clear Lake-Sherwoods Dam Road  
GPS Coordinates:

| Limits     | <b>Northing</b> | <b>Easting</b> |
|------------|-----------------|----------------|
| North-West | 54H0576813      | UTM5920265     |
| South-West | 54H0576812      | UTM5919985     |
| North-East | 54H0577091      | UTM5920228     |
| South East | 54H0577057      | UTM5919960     |

### Site Two

Season and Year: Winter 2002  
Area (hectares): 4  
Local Government Area (s): Horsham VIC  
Street Address / Directions: Rich and Millers Rd.  
GPS Coordinates:

| Limits     | <b>Northing</b> | <b>Easting</b> |
|------------|-----------------|----------------|
| North-West | 54H0578118      | UTM5900182     |
| South-West | 54H0578134      | UTM5899826     |
| North-East | 54H0578449      | UTM5900271     |
| South East | 54H0578451      | UTM5899930     |

### Site Three

Season and Year: Winter 2002  
Area (hectares): 2  
Local Government Area (s): Wagga Wagga NSW  
Street Address / Directions: Stoll's Lane  
GPS Coordinates:

Limits  
North-West  
South-West  
North-East  
South East

| <b>Northing</b> | <b>Easting</b> |
|-----------------|----------------|
| 6077632         | 517788         |
| 6077588         | 518067         |
| 6077360         | 517754         |
| 6077326         | 518032         |

#### **Site Four**

Season and Year Winter 2002  
Area (hectares): 6  
Local Government Area (s): Wagga Wagga NSW  
Street Address / Directions: Stoll's Lane  
GPS Coordinates:

#### **Limits**

North-West  
South-West  
North-East  
South East

| <b>Northing</b> | <b>Easting</b> |
|-----------------|----------------|
| 6077824         | 518293         |
| 6077771         | 518650         |
| 6077391         | 518231         |
| 6077338         | 518586         |

#### **Site Five**

Season and Year Winter 202  
Area (hectares): 8  
Local Government Area (s): Naracoorte/Lucindale SA  
Street Address / Directions: Mill Rd  
GPS Coordinates:

#### **Limits**

North-West  
South-West  
North-East  
South East

| <b>Northing</b> | <b>Easting</b> |
|-----------------|----------------|
| 54H0490527      | UTM5921485     |
| 54H0491116      | UTM5921687     |
| 54H0491019      | UTM5921255     |
| 54H0490835      | UTM5921211     |

#### **Site Six**

Season and Year Winter 2002  
Area (hectares): 5  
Local Government Area (s): Southern Grampians VIC  
Street Address / Directions: Old Crusher Rd  
GPS Coordinates:

#### **Limits**

North-West  
South-West  
North-East  
South East

| <b>Northing</b> | <b>Easting</b> |
|-----------------|----------------|
| 54H0579696      | UTM5801701     |
| 54H0579695      | UTM5801532     |
| 54H0579975      | UTM5801726     |
| 54H0579992      | UTM5801500     |

#### **Site Seven**

Season and Year Winter 2002  
Area (hectares): 1  
Local Government Area (s): Grant SA  
Street Address / Directions: Settlers Rd

GPS Coordinates:

Limits

North-West

South-West

North-East

South East

| <b>Northing</b> | <b>Easting</b> |
|-----------------|----------------|
| 5796545         | 477900         |
| 5796549         | 478041         |
| 5796446         | 478019         |
| 5796473         | 477910         |

### **Site Eight**

Season and Year

Winter 2002

Area (hectares):

7

Local Government Area (s):

Naracoorte/Lucindale

SA

Street Address / Directions:

Joys Rd

GPS Coordinates:

Limits

North-West

South-West

North-East

South East

| <b>Northing</b> | <b>Easting</b> |
|-----------------|----------------|
| 5927903         | 486050         |
| 5927872         | 486560         |
| 5927401         | 486063         |
| 5927477         | 486513         |

### **Site Nine**

Season and Year

Winter 2002

Area (hectares):

2.5

Local Government Area (s):

Wattle Range

SA

Street Address / Directions:

Lake Edward Rd

GPS Coordinates:

Limits

North-West

South-West

North-East

South East

| <b>Northing</b> | <b>Easting</b> |
|-----------------|----------------|
| 5830794         | 456589         |
| 5830785         | 465586         |
| 5830538         | 465583         |
| 5830546         | 465844         |

### **Site Ten**

Season and Year

Winter 2002

Area (hectares):

1

Local Government Area (s):

Grant

SA

Street Address / Directions:

Considine Rd

GPS Coordinates:

Limits

North-West

South-West

North-East

South East

| <b>Northing</b> | <b>Easting</b> |
|-----------------|----------------|
| 5821180         | 466586         |
| 5821064         | 466582         |
| 5821183         | 466470         |
| 5821070         | 466472         |

### **Site Eleven**

Season and Year

Summer 2002/03

Area (hectares):

7

Local Government Area (s):

Wattle Range

SA

Street Address / Directions: Riddoch Hwy

GPS Coordinates:

| Limits     | <b>Northing</b> | <b>Easting</b> |
|------------|-----------------|----------------|
| North-West | 54H 048 5883    | UTM 587 7467   |
| South-West | 54H 048 5861    | UTM 587 7109   |
| North-East | 54H 048 6183    | UTM 587 7344   |
| South East | 54H 048 6179    | UTM 587 6966   |

#### **Site Twelve**

Season and Year Summer 2002/03

Area (hectares): 1

Local Government Area (s): Wattle Range SA

Street Address / Directions: Tantanoola

GPS Coordinates:

| Limits     | <b>Northing</b> | <b>Easting</b> |
|------------|-----------------|----------------|
| North-West | 54H 045 4897    | UTM 582 4253   |
| South-West | 54H 045 4749    | UTM 582 4220   |
| North-East | 54H 045 4903    | UTM 582 4610   |
| South East | 54H 045 4752    | UTM 582 4552   |

#### **Site Thirteen**

Season and Year Summer 2002/03

Area (hectares): 1

Local Government Area (s): Wattle Range SA

Street Address / Directions: Krongart Rd

GPS Coordinates:

| Limits     | <b>Northing</b> | <b>Easting</b> |
|------------|-----------------|----------------|
| North-East | 54H 048 0923    | UTM 585 1940   |
| South-East | 54H 048 1012    | UTM 585 1915   |
| North-West | 54H 048 0894    | UTM 585 1640   |
| South West | 54H 048 0989    | UTM 585 1623   |

#### **Site Fourteen**

Season and Year Summer 2002/03

Area (hectares): 2

Local Government Area (s): Lucindale / Naracoorte SA

Street Address / Directions: Boddingtons Rd

GPS Coordinates:

| Limits   | <b>Northing</b> | <b>Easting</b> |
|----------|-----------------|----------------|
| Northern | 54H 048 1668    | UTM 592 4463   |
| Eastern  | 54H 048 1916    | UTM 592 4391   |
| Southern | 54H 048 1865    | UTM 592 4283   |
| Western  | 54H 048 1658    | UTM 592 4332   |

#### **Site Fifteen**

Season and Year Summer 2002/03

Area (hectares): 2

Local Government Area (s): Naracoorte / Lucindale SA  
Street Address / Directions: Country Club Rd

GPS Coordinates:

| Limits        | <b>Northing</b> | <b>Easting</b> |
|---------------|-----------------|----------------|
| North Western | 54H 044 6850    | UTM 590 8425   |
| South Western | 54H 044 6844    | UTM 590 8259   |
| South Eastern | 54H 044 7127    | UTM 590 8250   |
| North Eastern | 54H 044 7131    | UTM 590 8423   |

#### **Site Sixteen**

Season and Year: Summer 2002/03  
Area (hectares): 0.5  
Local Government Area (s): Grant SA  
Street Address / Directions: Mingbool Rd

GPS Coordinates:

| Limits        | <b>Northing</b> | <b>Easting</b> |
|---------------|-----------------|----------------|
| North Western | 54H 049 6016    | UTM 583 2338   |
| North Eastern | 54H 049 6129    | UTM 583 2400   |
| South Eastern | 54H 049 6245    | UTM 583 2216   |
| South Western | 54H 049 6132    | UTM 583 2158   |

#### **Site Seventeen**

Season and Year: Summer 2002/03  
Area (hectares): 1.3  
Local Government Area (s): Naracoorte-Lucindale SA  
Street Address / Directions: North Settlement Rd

GPS Coordinates:

| Limits        | <b>Northing</b> | <b>Easting</b> |
|---------------|-----------------|----------------|
| North Western | 54H 048 9417    | UTM 589 2261   |
| North Eastern | 54H 048 9617    | UTM 589 2260   |
| South Eastern | 54H 048 9613    | UTM 589 2018   |
| South Western | 54H 048 9422    | UTM 589 2015   |

#### **Site Eighteen**

Season and Year: Summer 2002/03  
Area (hectares): 2.55  
Local Government Area (s): Wattle Range SA  
Street Address / Directions: Lake Edward Rd

GPS Coordinates:

| Limits            | <b>Northing</b> | <b>Easting</b> |
|-------------------|-----------------|----------------|
| North West Corner | 583 0975        | 465 707        |
| North East Corner | 583 0977        | 465 971        |
| South West Corner | 583 0722        | 465 707        |
| South East Corner | 583 0718        | 465 970        |

#### **Site Nineteen**

Season and Year: Summer 2002/03

Area (hectares): 6.0  
Local Government Area (s): Grant SA  
Street Address / Directions: Wash Rd.

GPS Coordinates:

| Limits              | <b>Northing</b> | <b>Easting</b> |
|---------------------|-----------------|----------------|
| North Eastern Point | UTM 583 5978    | 54H 049 4710   |
| Southern Point      | UTM 583 5589    | 54H 049 4432   |
| North Western Point | UTM 583 5942    | 54H 049 4285   |
| Eastern Point       | UTM 583 5750    | 54H 049 4640   |
| Northern Point      | UTM 583 5994    | 54H 049 4316   |

### **Site Twenty**

Season and Year Summer 2002/03

Area (hectares): 1  
Local Government Area (s): Wattle Range SA  
Street Address / Directions: Kalangadoo Rd

GPS Coordinates:

| Limits   | <b>Northing</b> | <b>Easting</b> |
|----------|-----------------|----------------|
| Northern | 54H 045 5824    | UTM 584 6403   |
| Eastern  | 54H 045 5973    | UTM 584 6259   |
| Southern | 54H 045 5877    | UTM 584 6158   |
| Western  | 54H 045 5714    | UTM 584 6301   |

### **Site Twenty one**

Season and Year Summer 2002/03

Area (hectares): 0.5  
Local Government Area (s): Wattle Range SA  
Street Address / Directions: Slaughterhouse Rd

GPS Coordinates:

| Limits        | <b>Northing</b> | <b>Easting</b> |
|---------------|-----------------|----------------|
| North Western | 54H 047 5803    | UTM 584 1510   |
| North Eastern | 54H 047 5944    | UTM 584 1430   |
| South Eastern | 54H 047 5742    | UTM 584 1353   |
| South Western | 54H 047 5867    | UTM 584 1257   |

### **Site Twenty two**

Season and Year Winter 2003  
Area (hectares): 9  
Local Government Area (s): Wagga Wagga NSW  
Street Address / Directions: Cobden's Rd

GPS Coordinates:

| Limits        | <b>Northing</b> | <b>Easting</b> |
|---------------|-----------------|----------------|
| North Western | 6122820         | 523384         |
| North Eastern | 6122805         | 523583         |
| South Eastern | 6121978         | 523609         |
| South Western | 6121990         | 523422         |

### **Site Twenty three**

Season and Year Winter 2003  
Area (hectares): 1  
Local Government Area (s): Wattle Range SA  
Street Address / Directions: Kongart Rd  
GPS Coordinates:

| Limits        | <b>Northing</b> | <b>Easting</b> |
|---------------|-----------------|----------------|
| North Western | E 140°47.160'   | S 37°28.765'   |
| North Eastern | E 140°47.114'   | S 37°28.773'   |
| South Eastern | E 140°47.158'   | S 37°28.870'   |
| South Western | E 140°47.110'   | S 37°28.867'   |

#### **Site Twenty four**

Season and Year Winter 2003  
Area (hectares): 2  
Local Government Area (s): Horsham Vic  
Street Address / Directions: Clear Lake-Sherwoods Dam Rd  
GPS Coordinates:

| Limits        | <b>Northing</b> | <b>Easting</b> |
|---------------|-----------------|----------------|
| North Western | 54H0575179      | UTM5918713     |
| North Eastern | 54H0575299      | UTM5918668     |
| South Eastern | 54H0575249      | UTM5918482     |
| South Western | 54H0575112      | UTM5918525     |

#### **Site Twenty five**

Season and Year Winter 2003  
Area (hectares): 4  
Local Government Area (s): Horsham Vic  
Street Address / Directions: Bell Rd  
GPS Coordinates:

| Limits        | <b>Northing</b> | <b>Easting</b> |
|---------------|-----------------|----------------|
| North Western | 54H0600722      | UTM5905206     |
| North Eastern | 54H0600995      | UTM5905377     |
| South Eastern | 54H0600970      | UTM5905176     |
| South Western | 54H0600744      | UTM5905392     |

#### **Site Twenty six**

Season and Year Winter 2003  
Area (hectares): 9  
Local Government Area (s): Horsham Vic  
Street Address / Directions: Kalkee East Rd  
GPS Coordinates:

| Limits        | <b>Northing</b> | <b>Easting</b> |
|---------------|-----------------|----------------|
| North Western | 54H0617644      | UTM5957803     |
| North Eastern | 54H0618101      | UTM5957789     |
| South Eastern | 54H0618564      | UTM5957107     |
| South Western | 54H0617636      | UTM5957541     |

### Site Twenty seven

Season and Year Winter 2003  
Area (hectares): 5  
Local Government Area (s): Southern Grampians Vic  
Street Address / Directions: Old Crusher Rd

GPS Coordinates:

| Limits        | <b>Northing</b> | <b>Easting</b> |
|---------------|-----------------|----------------|
| North Western | 54H0580047      | UTM5802209     |
| North Eastern | 54H0580235      | UTM5802234     |
| South Eastern | 54H0580239      | UTM5801943     |
| South Western | 54H0580047      | UTM5801920     |

### Site Twenty eight

Season and Year Winter 2003  
Area (hectares): 1.8  
Local Government Area (s): Wagga Wagga NSW  
Street Address / Directions: Stoll's Lane

GPS Coordinates:

| Limits        | <b>Northing</b> | <b>Easting</b> |
|---------------|-----------------|----------------|
| North Western | 6079179         | 520192         |
| North Eastern | 6079151         | 520423         |
| South Eastern | 6078905         | 520393         |
| South Western | 6078932         | 520168         |

### Site Twenty nine

Season and Year Winter 2003  
Area (hectares): 5.4  
Local Government Area (s): Coolamon NSW  
Street Address / Directions: Ashbridge Rd

GPS Coordinates:

| Limits        | <b>Northing</b> | <b>Easting</b> |
|---------------|-----------------|----------------|
| North Western | 6155108         | 501183         |
| North Eastern | 6155079         | 501396         |
| South Eastern | 6154680         | 501612         |
| South Western | 6154650         | 501183         |

### Site Thirty

Season and Year Winter 2003  
Area (hectares): 0.52  
Local Government Area (s): Victoria Plains WA  
Street Address / Directions: Bindi-Bindi-Toodyay Rd

GPS Coordinates:

| Limits        | <b>Northing</b> | <b>Easting</b> |
|---------------|-----------------|----------------|
| North Western | 6561316.9       | 450358.7       |
| North Eastern | 6561236.0       | 450396.1       |
| South Eastern | 6561156.0       | 450235.3       |
| South Western | 6561232.0       | 450205.5       |

### Site Thirty one

Season and Year Winter 2003  
Area (hectares): 9  
Local Government Area (s): Grant SA  
Street Address / Directions: Glenelg River Rd

GPS Coordinates:

| Limits        | <b>Northing</b> | <b>Easting</b> |
|---------------|-----------------|----------------|
| North Western | 5807222         | 482910         |
| North Eastern | 580225          | 483176         |
| South Eastern | 5806815         | 483177         |
| South Western | 5806813         | 482914         |

### Site Thirty two

Season and Year Winter 2003  
Area (hectares): 3  
Local Government Area (s): Grant SA  
Street Address / Directions: Port MacDonell Rd

GPS Coordinates:

| Limits        | <b>Northing</b> | <b>Easting</b> |
|---------------|-----------------|----------------|
| North Western | 5799927         | 477946         |
| North Eastern | 5799850         | 478149         |
| South Eastern | 5799727         | 478092         |
| South Western | 5799786         | 477913         |

### Notification of Locations

3. Prior to commencing to grow the GMO at an area, the area's GPS coordinates and either a street address, or other directions to the area, must be provided to the Regulator by notice in writing. The notice must identify the GMO proposed to be grown at the area. If more than one GMO is proposed to be grown at the area, the notice must provide additional details about where, within the area, the different GMOs are proposed to be grown.

### Control of Locations and other areas used in connection with this licence

4. The licence holder must be able to access and control a Location or other area used in connection with this licence to the extent necessary to comply with this licence, for the duration of the life of the licence.

### Notification of planting of the GMO

- 5.1 The licence holder must provide notices in writing to the Regulator in respect of each of the following:
  - (a) the short term forecasted date or dates of commencement of planting of the GMO at each area proposed to be planted (and Pollen Trap in respect of each area, if any) ('the short term forecast planting date notice'). This notice must be provided at least 7 days, and not more than 20 days, prior to the forecasted date or dates of commencement of planting set out in the notice;

- (b) the actual date or dates of commencement of planting of the GMO at each area (and Pollen Trap in respect of the area, if any) ('the actual planting date notice'). This notice must be provided within 7 days of commencement of planting of the GMO at the area.

5.2 In respect of planting of the GMO in Winter 2002 only, the licence holder must provide notices in writing to the Regulator in respect of the actual date or dates of commencement of planting of the GMO at each area (and Pollen Trap in respect of the area, if any) ('the actual planting date notice'). This notice must be provided within 7 days of commencement of planting of the GMO at the area.

### **Notification of commencement of flowering of the GMO**

- 6. The licence holder must provide notices in writing to the Regulator in respect of each of the following:
  - (a) the short term forecasted date or dates of commencement of flowering of the GMO at each area proposed to be planted (and Pollen Trap in respect of each area, if any) ('the short term forecast flowering date notice'. This notice must be provided at least 7 days, and not more than 20 days, prior to the forecasted date or dates of commencement of flowering set out in the notice;
  - (b) the actual date or dates of commencement of flowering of the GMO at each area (and Pollen Trap in respect of each area, if any) ('the actual planting date notice'). This notice must be provided within 7 days of commencement of flowering of the GMO at the area.

### **Notification of commencement of harvest of GMO**

- 7. The licence holder must provide notices in writing to the Regulator in respect of each of the following:
  - (a) the short term forecasted date or dates of commencement of harvesting of the GMO at each area proposed to be planted (and Pollen Trap in respect of each area, if any) ('the short term forecast harvest date notice'). This notice must be provided at least 7 days, and not more than 20 days, prior to the forecasted date or dates of commencement of harvesting set out in the notice;
  - (b) the actual date or dates of commencement of harvesting of the GMO at each area (and Pollen Trap in respect of each area, if any) ('the actual harvest date notice'). This notice must be provided within 7 days of commencement of harvesting of the GMO at the area.

### **Measures to manage gene flow**

- 8. For each Location, one of the following methods for managing gene flow must be adopted:
  - (a) The GMO at the Location must be male sterile Canola only. It must be surrounded by an Isolation Zone extending outwards by 400m in all directions from the outer edge of the Location;
  - (b) All flowering heads of the GMO at the Location must be covered by selfing bags at least 7 days prior to flowering. The bags must remain on the GMO for the duration of flowering of the GMO. The Location must be surrounded by an Isolation Zone extending outwards by 400m in all directions from the outer edge of the Location;
  - (c) The GMO at the Location must be housed in an insect-proof tent. The tent must be erected at least 7 days prior to flowering of the GMO and remain in place for the duration of flowering of the GMO. The Location must be surrounded by an Isolation Zone extending outwards by 400m in all directions from the outer edge of the Location;

- (d) The Location must be surrounded by an Isolation Zone extending outwards by 1km in all directions from the outer edge of the Location; or
- (e) The Location must be surrounded by a Pollen Trap. The Pollen Trap must be surrounded by an Isolation Zone extending outwards by 400m in all directions from the outer edge of the Pollen Trap.

### **Conditions relating to Isolation Zones**

- 9. No Brassica crop may be grown in an Isolation Zone while the GMO is being grown at the Location within it.
  - 9.1 If any *Brassica* crop occurs in an Isolation Zone while the GMO is being grown at the Location within it, either the *Brassica* crop or the GMO in the Location (and its Pollen Trap, if any) must be destroyed prior to flowering.
  - 9.2 An Isolation Zone must be able to be accessed and controlled by the licence holder to an extent that is commensurate with the licence holder's rights to access and control the Location within it.
  - 9.3 If the GMO at the Location (and Pollen Trap, if any) is destroyed pursuant to this condition, the destruction of the GMO (and Pollen Trap, if any) is taken to be a harvest for the purposes of this licence.

*Note: If a Location (and Pollen Trap, if any) has to be destroyed because a Brassica Crop is planted in the Isolation Zone, the Location is taken to have been harvested. Cleaning of the Location and Pollen Trap must occur soon afterwards (see the conditions below about Cleaning Locations post harvest) and post harvest monitoring of the Location and Pollen Trap must be commenced.*

### **Conditions relating to Pollen Traps**

- 10.1 Once planted, Pollen Trap plants must be handled and controlled as if they are GMO and Material from Pollen Trap plants must be handled and controlled as if it is Material from the GMO.
- 10.2 A Pollen Trap must be able to be accessed and controlled by the licence holder to an extent that is commensurate with the licence holder's rights to access and control the Location within it.

*Note: Conditions about Cleaning Pollen Traps occur elsewhere in this licence.*

### **Research on Gene Flow**

- 11 The licence holder must, in consultation with the OGTR, develop an agreed research program to ensure the ongoing effectiveness of management actions, including but not limited to:
  - (a) collecting information on the effectiveness of any Pollen Trap in preventing gene flow from the GMO to non-genetically modified Canola, other *Brassica* crops or *Brassicaceous* weeds. This program should collect information relating to the effect of the presence or absence of a Pollen Trap on the rate of outcrossing from the GMO to non-genetically modified Canola, other *Brassica* crops and *Brassicaceous* weeds.
  - (b) collecting information on the frequency of outcrossing from the GMO to non-genetically modified Canola, other *Brassica* crops or *Brassicaceous* weeds, at short distances (that is, 0-10 metres) under Australian conditions

## Monitoring during growing the GMO

- 12.1 Each Location, Pollen Trap and Monitoring Zone must be monitored for the presence of *Brassicaceous* weeds and *Brassica* plants at least once every 35 days, commencing 14 days prior to flowering of the GMO and concluding when the GMO has completed flowering. Any *Brassicaceous* weeds and *Brassica* plants detected during monitoring must be destroyed before flowering.
- 12.2 Each Monitoring Zone must be monitored for the presence of Canola at least once every 35 days from the planting of the GMO until either harvest of the GMO or the Location is Cleaned. Any Canola detected during monitoring must be destroyed before flowering.
- 12.3 Each Isolation Zone must be monitored for the presence of *Brassica* crops at least once every 35 days commencing 14 days prior to flowering of the GMO and concluding when the GMO has completed flowering. If a *Brassica* crop is detected in an Isolation Zone during monitoring, then either the *Brassica* crop must be destroyed prior to flowering or the GMO at the Location (and Pollen Trap, if any) must be destroyed prior to flowering.
- 12.4 The results of monitoring activities must be reported to the Regulator in writing. Results must be reported to the Regulator within 35 days of any day on which monitoring occurs. Results of reporting must include:
  - (a) details of the areas monitored;
  - (b) details of the date of monitoring;
  - (c) the names of the person or persons who undertook the monitoring and details of the experience, training or qualification that enabled them to recognise Volunteer plants, *Brassica* plants and *Brassicaceous* weeds;
  - (d) the number of Volunteer plants, *Brassica* plants and *Brassicaceous* weeds observed, if any;
  - (e) details of whether the Volunteer plants, *Brassica* plants and *Brassicaceous* weeds observed, if any, occurred in the Location, the Pollen trap or the Monitoring Zone;
  - (f) details of the development stages reached by the Volunteer plants, *Brassica* plants and *Brassicaceous* weeds, if any;
  - (g) details of methods used to destroy Volunteer plants, *Brassica* plants and *Brassicaceous* weeds identified if any; and
  - (h) details of the date on which Volunteer plants, *Brassica* plants and *Brassicaceous* weeds were Cleaned.

## Harvest of GMO

- 13.1 Subject to Condition 13.5 below, the GMO at a Location and Pollen Trap plants may be harvested for seed only.
- 13.2 If the GMO or Pollen Trap plants are harvested, they must be harvested separately from any other Canola.
- 13.3 Subject to Condition 13.5 below, following harvest of the GMO and Pollen Trap plants (if any):
  - (a) Any harvested seed must be immediately, or as soon as is reasonably practicable:

- (i) stored in a sealed container that is signed so as to indicate that it contains GM Canola seed, within a locked facility that is signed so as to indicate that genetically modified Canola seed is stored within the facility; or
- (ii) exported; or
- (iii) rendered unviable by autoclaving; or
- (iv) destroyed by burning; or
- (v) destroyed by burial under 1 metre of soil.

13.4 Subject to Condition 13.5 below, any Canola seed obtained from harvest may only be transported to the extent necessary to store it, export it or destroy it.

13.5 An amount of harvested Canola seed and/or Material from the GMO, obtained from harvest, may be saved and transported to the Seed Services Centre and SARDI Field Crops Pathology Unit, Primary Industries and Resources South Australia at Urrbrae, South Australia, where:

- germination analyses may be conducted on the harvested Canola seed;
- purity analysis may be conducted on the harvested Canola seed; and
- analysis of the presence of weed seed may be conducted on the harvested Canola seed;
- compositional analyses may be conducted on Material from the GMO; and
- pathogen analyses may be conducted on the harvested Canola seed.

13.6 Canola plants that develop in the course of the germination analyses must be destroyed prior to flowering.

13.7 The amount of harvested Canola seed and/or Material from the GMO that may be saved and transported is the amount necessary to perform the analyses.

13.8 Harvested Canola seed and/or Material from the GMO may be stored during the course of performing the analyses. Where Harvested Canola seed and/or Material from the GMO is stored for the purpose of analysis, it must be stored in a locked room. Within the room, the stored material must be stored in a sealed container that is signed so as to indicate that it contains GM Canola seed and/or Material from the GMO.

13.9 Once the analyses authorised by these licence conditions has been completed and any other analyses have been completed, all GM Canola seed, Material from the GMO used in the analyses must be destroyed by either autoclaving, incineration, or autoclaving followed by incineration. Canola plants that are grown in the course of the germination analyses must be destroyed prior to flowering. All GM canola seed not used in the analyses must be returned to Bayer CropScience Pty Ltd.

#### **Conditions relating to destruction by burial**

14.1 Subject to condition 14.2 below, if the GMO, Pollen Trap plants, Material from the GMO or Material from Pollen Trap plants are destroyed by burial, the licence holder must:

- (a) within 30 days of burial, provide the Regulator by notice in writing of the precise location of the Burial site (GPS coordinates and either a street address or other directions to the Location) and the date on which it was buried. The notice must identify the GMO or Pollen Trap plant, buried at a the Burial site;
- (b) monitor the burial site at least once every 3 months for a period of three years to identify:

- (i) any significant disturbance that may effect the emergence of volunteer plants and if disturbance is identified, notify the Regulator of appropriate remedial action taken; and
- (ii) any emergence of Volunteer plants. If Volunteer plants are identified, the burial site must be Cleaned.

14.2 Monitoring of the burial site is not required if burial takes place at a Municipal or commercial land fill and the Regulator is provided with a written notice from the manager of the land fill undertaking

- (a) not to disturb the burial site for a period of at least 3 years from the date of burial; and
- (b) to notify both the licence holder and the Regulator in writing of any significant disturbance of the burial site that may affect the emergence of Volunteer plants.

### **Cleaning – post harvest and generally**

15.1 Where Equipment, a Location or other area is used pursuant to this licence in respect of GMOs, Material from GMOs, Pollen Trap plants or Material from Pollen Trap plants, it must be Cleaned.

15.2 Subject to condition 15.5, for each Location, either within 14 days of harvest of the GMO or 9 months after planting, the Location must be Cleaned.

15.3 Within 14 days of either harvest or Cleaning of the GMO at a Location, the Pollen Trap in respect of that Location, if any, must be Cleaned.

15.4 When Equipment is Cleaned, the area in which the Equipment is Cleaned must also be Cleaned.

*Note: For the sake of clarity, it is not necessary for Equipment to be Cleaned only at a Location.*

15.5 Cleaning must occur immediately or as soon as practicable after the use and before it is used for any other purpose.

*Note: For example, if seed is harvested with a mechanical harvester, the harvester must be Cleaned immediately following its use and before any other Canola is harvested.*

15.6 On the request of the Regulator, the Regulator must be provided with written documentation of the procedures in place to ensure continuing compliance with the Cleaning conditions in this licence.

*Note: The Regulator strongly favours the adoption of burning and light tillage as effective methods to Clean Locations and Pollen Traps post-harvest.*

### **Conditions relating to Grazing**

16 Grazing must not be adopted as a method for destruction in an area until after the area has been harvested and Cleaned.

### **Reduction of the seed bank and secondary dormancy**

17.1 Following Cleaning of any Location or Pollen Trap, each Location and Pollen Trap must be lightly tilled.

17.2 Subject to condition 17.4, light tillage must occur on at least 2 separate occasions in such a way as to promote the growth of any remaining Canola and to reduce onset of secondary dormancy of Canola seed.

- 17.3 The 2 occasions must be carried out at least 4 weeks apart.
- 17.4 If light tillage is used to Clean a Location or Pollen Trap, then only 1 subsequent occasion of light tilling must be performed.
- 17.5 All light tillage obligations must be performed within 12 months of harvest of the GMO or Pollen Trap.
- 17.6 The soil at the Location (and Pollen Trap, if any) must not be disturbed in a way that would bury plant material in that area to a depth of more than 50mm, until at least 14 days after all light tillage obligations have been performed.

*Note: This condition prohibits 'deep tillage' (ie deep soil disturbance that would bury the GMO to a depth of more than 50mm) to occur at the location or pollen trap until after light tillage obligations have been performed.*

- 17.7 A report on light tilling activities undertaken must be reported to the Regulator in writing. Results must be reported to the Regulator within 35 days of any day on which light tilling occurs. Results of reporting must include:
- (a) details of the Location (and Pollen Trap, if any) tilled; and
  - (b) details of the tillage methods used.

### **Conditions relating to light tillage**

18. Light tillage may only be adopted as a method for destruction in conditions where germination of Canola is reasonably likely to ensue (for example, immediately after rain or irrigation).

*Note: This condition prohibits the incorporation of light tillage methods at times when germination of Canola is not likely to ensue as a result (eg, during a drought).*

### **Monitoring – post harvest and generally**

- 19.1 Following Cleaning of each Location, the following places must be monitored for the existence of Volunteer plants:
- (a) the Location;
  - (b) the Pollen Trap in respect of the Location, if any; and
  - (c) any areas used to Clean Equipment used in connection with the GMO or to destroy the GMO, Material from the GMO, Pollen Trap plants or Material from Pollen Trap plants.
- 19.2 Following Cleaning of each Location, the following places must be monitored for the existence of Volunteer plants:
- (a) the Monitoring Zone in respect of the Location.
- 19.3 Monitoring must be performed by a person who is able to recognise Volunteer plants, Brassica plants and Brassicaceous weeds.
- 19.4 Any Volunteer plants detected during monitoring must be Cleaned before flowering.
- 19.5 All the places required to be monitored must be monitored, subject to condition 19.6 below, at least once every 35 days for at least 2 years from the last day of Cleaning of the Location, and thereafter, until such time as the place to be monitored shows no presence of Volunteer plants for a period of 12 months. Thereafter, all the places required to be monitored must be monitored, subject to condition 19.6 below, at least once every 35 days, until such time as the Regulator has provided a notice in writing to the licence holder that further monitoring is no longer required.

- 19.6 If six consecutive monitoring visits (at 35 day intervals) show no presence of Volunteer plants, monitoring may take place at intervals of at least once every three months for the remainder of the monitoring.
- 19.7 The results of monitoring activities must be reported to the Regulator in writing. Results must be reported to the Regulator within 35 days of any day on which monitoring occurs. Results of reporting must include:
- (a) details of the areas monitored;
  - (b) details of the date of monitoring;
  - (c) the names of the person or persons who undertook the monitoring and details of the experience, training or qualification that enabled them to recognise Volunteer plants, *Brassica* plants and *Brassicaceous* weeds;
  - (d) the number of Volunteer plants observed, if any;
  - (e) details of whether the Volunteer plants observed, if any, occurred in the Location, the Pollen trap or the Monitoring Zone;
  - (f) details of the development stages reached by the Volunteer plants, if any;
  - (g) details of methods used to destroy Volunteer plants identified, if any; and
  - (h) details of the date on which Volunteer plants were Cleaned.

#### **Use of Locations post-harvest**

- 20.1 If the GMO is grown at a Location, no other Canola or *Brassica* plant of any kind may be planted at the Location, or Pollen Trap in respect of the Location, if any, after harvest of the GMO, until monitoring obligations are satisfied.
- 20.2 If the GMO is grown at a Location, no other Canola may be grown at the Monitoring Zone in respect of the Location until monitoring obligations are satisfied.
- 20.3 If the GMO is grown at a Location, no plants may be planted at the Location, or Pollen trap in respect of the Location, if any, until monitoring obligations are satisfied unless:
- (a) prior to planting the plants, the Regulator has received written notice of the proposed date of planting and the plant proposed to be planted; and
  - (b) the plants are grasses (grass pastures), cereals (cereal crops) or a plant agreed to in writing by the Regulator; and
  - (c) the Regulator is satisfied that monitoring and destruction of Volunteer plants prior to flowering will not be adversely affected by the planting.

#### **Transportation of the GMO, Material from GMO, Pollen Trap plants and Material from Pollen Trap plants**

- 21.1 The GMO, Material from the GMO, Pollen Trap plants and Material from Pollen Trap plants must not be transported unless it is contained within a primary, sealed container that is packed in a secondary, unbreakable container.
- 21.2 Every container used to transport the GMO, Material from the GMO, Pollen Trap plants or Material from Pollen Trap plants must be labelled:
- (a) to indicate that it contains genetically modified plant material; and

(b) with telephone contact numbers for the licence holder and instructions to contact the licence holder in the event that the container is broken or misdirected.

21.3 The licence holder must have in place accounting procedures to verify whether the same quantity of GMO, Material from the GMO, Pollen Trap Plant or Material from Pollen Trap plants sent is delivered and must document methods and procedures used for transportation of GMOs, Material from GMOs, Pollen Trap plants and Material from Pollen Trap plants.

### **Testing methodology**

22. The licence holder must provide a written instrument to the Regulator describing an experimental method that is capable of reliably detecting the presence of the GMO and any transferred genetically modified material that might be present in a recipient organism. The instrument must be provided within 30 days of planting of the GMO.

### **Contingency Plans**

23.1 Within 30 days of the date of the commencement of this licence, a written Contingency Plan must be submitted to the Regulator detailing measures to be taken in the event of the unintended presence of the GMO, Material from the GMO, Pollen Trap plants and Material from Pollen Trap plants, outside a Location, or Pollen trap in respect of a Location, that must be monitored.

23.2 The Contingency Plan must include details of procedures to:

- (a) ensure the Regulator is notified immediately if the licence holder becomes aware of the event;
- (b) to destroy any of the GMOs, Material from the GMOs, Pollen Trap plants or Material from Pollen Trap plants; and
- (c) monitor and destroy any Volunteer plants that may exist as a result of the event.

23.3 The Contingency Plan must be implemented in the event that the unintended presence of the GMO, Material from the GMO, Pollen Trap plants or Material from Pollen Trap plants is discovered outside an area that must be monitored.

### **Compliance Management Plan**

24. Prior to growing the GMO, a written Compliance Management Plan must be provided to the Regulator. The Compliance Management Plan must describe in detail how the licence holder intends to ensure compliance with these conditions and document that compliance.

### **Reporting**

25. The licence holder must provide the Regulator with a written report within 90 days of each anniversary of this licence, in accordance with any Guidelines issued by the Regulator in relation to annual reporting.

### **GMO and Pollen Trap plants must not be consumed**

26. The GMO, Material from the GMO, Pollen Trap plants and Material from Pollen Trap plants must not be used for human food or animal feed.

**Table 1. Potential gene flow between Canola (*B. napus*) & Australian *Brassicaceae* species** (P. Salisbury 2002)

| Category                              | I   | II  | III   | IV  | V   | VI   |
|---------------------------------------|---|---|---|---|---|--|
| Tribe                                 | <i>Brassicaceae</i>   | <i>Brassicaceae</i>   | <i>Brassicaceae</i>   | <i>Brassicaceae</i>   | <i>Brassicaceae</i>   | Other  |
| Glasshouse 'rescued' hybrids          | Yes   | Yes   | Yes   | Yes   | No  | No   |
| Glasshouse hand hybrids               | Yes   | Yes   | Yes   | No  | No  | No   |
| Field hybrids                         | Yes   | Yes <sup>2</sup>  | Not reported  | Not reported  |   |  |
| Gene introgression                    | Yes/Likely <sup>1</sup>   | Not reported  |   |   |   |  |
| Weeds                                 | <i>Brassica rapa</i><br><i>Brassica juncea</i> <sup>1</sup>   | <i>Raphanus raphanistrum</i><br><i>Hirschfeldia incana</i><br><i>Sinapis arvensis</i> | <i>Brassica fruticulosa</i><br><i>Brassica nigra</i><br><i>Brassica tournefortii</i><br><i>Diplotaxis muralis</i><br><i>Diplotaxis tenuifolia</i><br><i>Rapistrum rugosum</i>   | <i>Brassica oxyrrhina</i><br><i>Diplotaxis tenuisiliqua</i> | <i>Conringia orientalis</i><br><i>Carrichtera annua</i><br><i>Cakile maritima</i> | <i>Capsella bursapastoris</i><br><i>Cardaria draba</i><br><i>Lepidium sp.</i><br><i>Myagrurn perfoliatum</i><br><i>Sisymbrium orientale</i><br><i>Sisymbrium irio</i><br><i>Sisymbrium erysimoides</i><br><i>Sisymbrium officinale</i> |
| Condiment, fodder & vegetable species | Forage <i>B. napus</i> <sup>1</sup><br><i>B. napus</i> vegetables <sup>1</sup><br><i>B. rapa</i> vegetables <sup>1</sup><br>Condiment <i>B. juncea</i> <sup>1</sup> |   | <i>Brassica alboglabra</i> <sup>3</sup><br><i>Brassica chinensis</i> <sup>4</sup><br><i>Brassica nigra</i><br><i>Brassica oleracea</i><br><i>Brassica pekinensis</i> <sup>4</sup><br><i>Raphanus sativus</i><br><i>Sinapis alba</i> |   |   |  |

→ DECREASING SEXUAL COMPATIBILITY →

<sup>1</sup> Considered likely to happen over a period of time if the species are in physical proximity and have flowering synchrony.

<sup>2</sup> Frequency of interspecific hybrids approx.  $10^{-4}$  to  $10^{-8}$ . Likelihood of subsequent introgression or formation of fertile amphidiploids significantly less again.

<sup>3</sup> This species is sometimes considered to be a subspecies of *B. oleracea*.

<sup>4</sup> These species have sometimes been considered to be subspecies of *B. rapa*.

**Table 1. Potential gene flow between Canola (*B. napus*) & Australian *Brassicaceae* species (cont.)**

| Category                     | I                   | II                  | III                 | IV                  | V                   | VI  |
|------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---|
| Tribe                        | <i>Brassicaceae</i> | <i>Brassicaceae</i> | <i>Brassicaceae</i> | <i>Brassicaceae</i> | <i>Brassicaceae</i> | Other   |
| Glasshouse 'rescued' hybrids | Yes                 | Yes                 | Yes                 | Yes                 | No                  | No  |
| Glasshouse hand hybrids      | Yes                 | Yes                 | Yes                 | No                  | No                  | No  |
| Field hybrids                | Yes                 | Yes                 | Not reported        | Not reported        |                     |   |
| Gene introgression           | Yes/Likely#         | Not reported        |                     |                     |                     |   |
| <i>Native species</i>        |                     |                     |                     |                     |                     | <i>Arabidella</i> (6 sp.)<br><i>Balbaretinia</i> (1 sp.)<br><i>Barbarea</i> (2 sp.)<br><i>Blennodia</i> (25 sp.)<br><i>Cardamine</i> (5 sp.)<br><i>Carinavalva</i> (1 sp.)<br><i>Cheesemania</i> (1 sp.)<br><i>Cuphonotus</i> (2 sp.)<br><i>Geococcus</i> (1 sp.)<br><i>Harmsiodoxa</i> (3 sp.)<br><i>Irenepharsus</i> (3sp.)<br><i>Lepidium</i> (35 sp.)<br><i>Menkea</i> (6 sp.)<br><i>Microlepidium</i> (2 sp.)<br><i>Pachymitus</i> (1 sp.)<br><i>Phlegmatospermum</i> (4 sp.)<br><i>Rorippa</i> (4 sp.)<br><i>Scambopus</i> (1 sp.)<br><i>Stenopetalum</i> (9 sp.) |

→ DECREASING SEXUAL COMPATIBILITY

