Biocontrol is a tool for managing weeds that works by introducing natural enemies of a particular weed. These natural enemies are species that feed or live on the target weed, and which can reduce its growth or numbers. They are used to control a range of weeds, from small quantities to large infestations, and can be used as a part of a broader strategy that includes other management techniques such as cultural, physical, and chemical control.

Biocontrol agents are selected based on their ability to effectively and safely reduce the target weed. They are often the result of extensive research and testing, involving scientists from various disciplines, including entomologists, ecologists, and soil scientists. The selection process involves identifying potential agents, evaluating their effectiveness against the weed, and assessing their safety and compatibility with other environmental factors.

Once a biocontrol agent is selected, it undergoes further testing to ensure it meets all necessary criteria. This includes testing its effectiveness, safety, and compatibility with other species and ecosystems. The results of these tests are then used to determine the agent's suitability for release in the field.

In New Zealand, biocontrol agents are developed and released by Landcare Research, which is a leading research institute specializing in the development of biocontrol agents for managing weeds. The institute has a strong reputation for producing safe and effective biocontrol agents, and has a proven track record of releasing hundreds of agents for a wide range of weeds.

Biocontrol agents are released into the environment using various methods, such as natural dispersal, hand releases, or aerial releases. The release methods vary depending on the specific agent and the conditions of the environment.

Once released, biocontrol agents are monitored for their effectiveness and safety. This involves regular assessments of their impact on the target weed, as well as the surrounding ecosystem. These assessments help to ensure that the agents are working as expected and that they are not causing any unintended harm.

Biocontrol is a versatile and effective tool for managing weeds, and it is widely recognized as a key component of a comprehensive weed management strategy. By using biocontrol agents, we can reduce our reliance on chemical control methods, which can have negative impacts on the environment and human health.
The text contains information about various plants and insects, their characteristics, and their interactions. It includes the following sections:

- **Gorse (Ulex europaeus)**: Mentioned as a species that has seen a resurgence, it is noted for its flowers and seeds.
- **Nodding Thistle (Cirsium vulgare)**: Described as an invasive species, it is aggressive and does not require a lot of care.
- **Bladder Thistle (Cirsium pumilum)**: Noted for its small, bladder-like fruits and a creamy green stem.
- **Hawkweeds (Hieracium spp.)**: Commonly found on gorse in bushy long enough to kill them off without significant impact. Another attempt to kill them off was made in the 1970s but was unsuccessful. It has also been reported as being widely distributed.
- **Ragwort (Jacobaea vulgaris)**: Mentioned as an invasive species, it is a common weed in European countries and is known for its large, yellow flowers.
- **Heather (Calluna vulgaris)**: Known for its red flowers, it is often found in mountainous areas.
- **Gorse Spider Mite (Tetranychus gossypii)**: A pest that causes damage to leaves by feeding on them.
- **Nodding Thistle Crown Weevil (Oemona hirta)**: A pest that feeds on the foliage and flowers of gorse.
- **Native Insects**: Includes species such as Aceria, Hemlock, and other insects.
- **Old Man's Beard (Clematis vitalba)**: Often found on gorse in bushy long enough to kill them off without significant impact.
- **Gorse Seed Mite (Phytomyza vitalbae)**: A pest that attacks gorse, causing damage to the leaves and stems.
- **Hemlock (Conium maculatum)**: Known for its purple flowers and spiny stems.
- **Gorse Neem Weevil (Osmia clavata)**: A pest that feeds on the foliage and flowers of gorse.
- **Old Man's Beard Leaf Fungus (Puccinia hieracii)**: A pathogen that affects the leaves and stems of gorse.
- **Phylloxera (G. hyperici)**: A pest that affects the stems and leaves of gorse.
- **Scotch Thistle (Cirsium arvense)**: Known for its large flowers and spiny stems.
- **Woolly Nightshade (Solanum linnaeanum)**: Known for its small, white flowers and spiny stems.
- **Scotch Thistle Gall Midge (Pseudotoma scirpis)**: A pest that causes galls on the stems and leaves of gorse.
- **Other Agents**: Includes species such as Tradescantia and Scrophularia.

The text also mentions the use of biocontrol agents to control invasive species, with specific examples such as the use of herbivorous insects to control gorse. It highlights the importance of biodiversity and the role of natural enemies in controlling pest populations.