Reduced Application of Chemicals in European Raspberry Production (RACER) was a project that brought together commercial and scientific partners from seven countries in Europe. The aim was to develop suitable commercial and scientific partners from seven countries in Europe. The aim was to develop a blueprint for future research on sustainable raspberry production in Europe. The approach could also be adopted for other small fruits, such as blackberry.

**Partnership**

<table>
<thead>
<tr>
<th>Country</th>
<th>Partner</th>
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<tbody>
<tr>
<td>Germany</td>
<td>Scottish Crop Research Institute</td>
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<tr>
<td>Greece</td>
<td>Scottish Soft Fruit Growers Ltd</td>
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<tr>
<td>Italy</td>
<td>Valmira Frutas LDA</td>
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<tr>
<td>Portugal</td>
<td>Pakkasmarja Oy</td>
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<tr>
<td>Switzerland</td>
<td>Stiftung Behindertenbetriebe in Kanton Schwyz</td>
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<tr>
<td>Great Britain</td>
<td>Istituto Agrario Provinciale di S. Michele</td>
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<tr>
<td>Great Britain</td>
<td>Eidgenössische Forschungsanstalt für Obst-, Wein- und Gartenbau</td>
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**Objectives**

- Developing integrated pest management approaches, with specific objectives set by industry, is a blueprint for future research on sustainable raspberry production in Europe. The approach could also be adopted for other small fruits, such as blackberry.
- Monitoring adult flight activity - develop spray thresholds.
- Develop methods to manage and understand TSSM population development.
- Improve raspberry cane midge population forecasting.
- Assess levels of post-harvest rots (moulds) plus others.
- Monitoring - a relationship established between adult beetle catch on traps and subsequent larval damage to ripe fruit.

**Management of two-spotted spider mite**

- Two-spotted spider mite (TSSM) most common but yellow spider mite (Eriophyes amygdali) can be found in Italy.
- Population dynamics of TSSM and predatory phytoseiids, and species composition of naturally occurring predatory mites differed between countries.
- Native predator mites were a key factor in TSSM management in all countries.

**Raspberry Cane Midge forecasting**

- The disease complex (Ridge Flight) can be controlled by accurate insecticide spraying against first generation raspberry cane midge eggs and larvae.

**Wingless weevils - monitoring**

- Wingless weevils (Olisthodorus spp.) are now important pests of raspberry in Europe. Damage caused by adult and larval feeding.
- Two passive traps examined, groove trap and dark landscape fabric trap.
- Neither is as effective as nocturnal beating.

**Post-harvest Rot - development of standardised sampling procedure**

- Post-harvest rots (grey mould (Botrytis cinerea) and other fungi) cause significant spoilage of soft fruit.
- A standardised sampling method was developed and tested. Procedure: 80 fruits "incubated" at c. 20-25°C and 10% infection level assessed. Some geographical variation observed.

**Training / information dissemination**

- Grower seminars/workshops held in all participating countries.
- Advisors/field officers and growers attended and participated in sampling.

Web site: www.scri.sari.ac.uk/assnracer