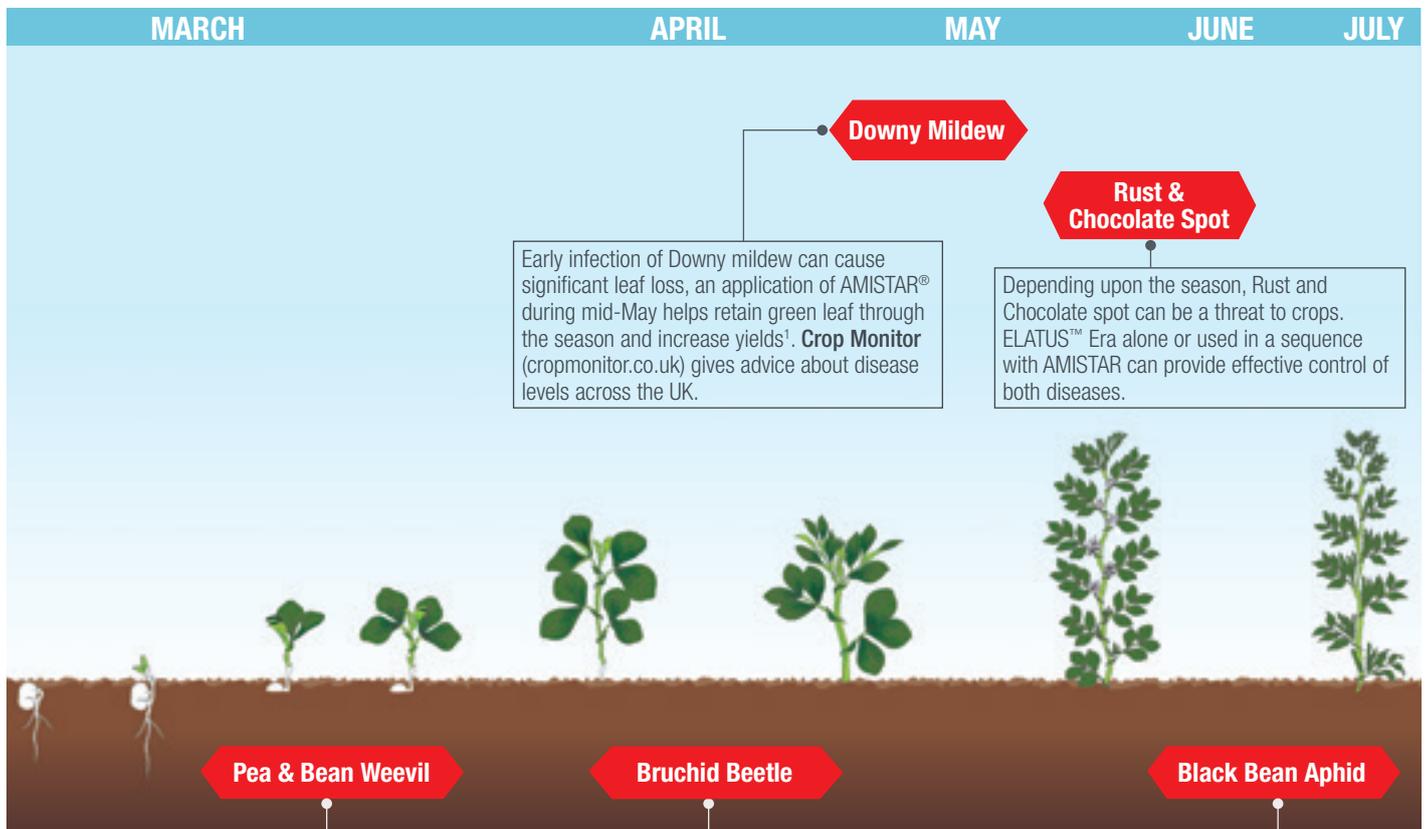


SPRING BEAN AGRONOMY ADVICE

CULTURAL ADVICE

Healthy, actively growing crops are able to withstand disease and pests better than stressed crops. Establishment is key to a good crop, consider delaying sowing until soil conditions improve to help encourage emergence and a good root structure. Later sowing can have an effect on yield, but this is often compensated by improved soil conditions. Information on this can be found by downloading the PGRO Optibean tool (available at www.pgro.org).



Early infection of Downy mildew can cause significant leaf loss, an application of AMISTAR® during mid-May helps retain green leaf through the season and increase yields¹. **Crop Monitor** (cropmonitor.co.uk) gives advice about disease levels across the UK.

Depending upon the season, Rust and Chocolate spot can be a threat to crops. ELATUS™ Era alone or used in a sequence with AMISTAR can provide effective control of both diseases.

To help reduce pesticide use monitor weevil activity with pheromone traps (see PGRO technical bulletin for details)². Poor growing crops are worst affected. Once threshold reached, apply HALLMARK Zeon®, if control is not achieved and resistance is suspected do not reapply.
A second spray is usually required 10 days after the first to give adequate control. Use HALLMARK Zeon as weevil numbers and egg laying increases.

Syngenta and PGRO have decided to stop the use of Bruchidcast. This decision has been made due to its inability to act as a stewardship tool to reduce spray events. From experiences in the last couple of seasons, increasing temperatures has caused prolonged periods of spray events, rather than a few targeted events. As such the tool was not promoting good practice, nor was it helping to achieve higher efficacy and therefore better quality.
However, if individuals want to keep track of their risk using the model behind Bruchidcast, it can be done with a few simple steps. Bruchid beetle adults fly into crops attracted to the pollen once flowering starts. When adults are found in the crop, and the maximum daily temperature has reached 20°C on two consecutive days and beans have developed the first pods on the lowest trusses, this will trigger egg laying the next day and therefore damage.

Black bean aphid usually appear from mid-May. Insecticide applications are justified when 5% of plants are colonised. Check the **Rothamsted Insect Survey** (rothamsted.ac.uk/insect-survey) for information about activity in your area.
A second spray is usually required as aphid numbers can build through June, monitor crops for presence.

¹ Data from Syngenta trials in 2015/16 have shown a yield benefit
² Refer to PGRO Technical Update TU08 – for spring beans, a threshold catch occurs when an average count per trap exceeds 30 weevils on any one recording day (traps should be sited by mid-February and weevils counted three times each week)

PRODUCTS FOR FIELD BEANS



MAPP No: 18039

Approved use: Field beans

Maximum individual dose: 1.0 l/ha

Maximum number of applications: 2

Latest time of application: 35 days before harvest, 21 day minimum application interval. FRAC guidelines must be followed



MAPP No: 12629

Approved use: Field beans

Maximum individual dose: 75 ml/ha

Maximum total dose: 150 ml/ha

Latest time of application: 25 days before harvest, 7 day minimum application interval



MAPP No: 17889

Approved use: Field beans and Combining peas

Maximum individual dose: 0.66 l/ha

Maximum number of applications: 1

Latest time of application: Up to and including 20% of pods having reached typical length (GS72)

Diseases in field beans: Bean rust and Chocolate spot

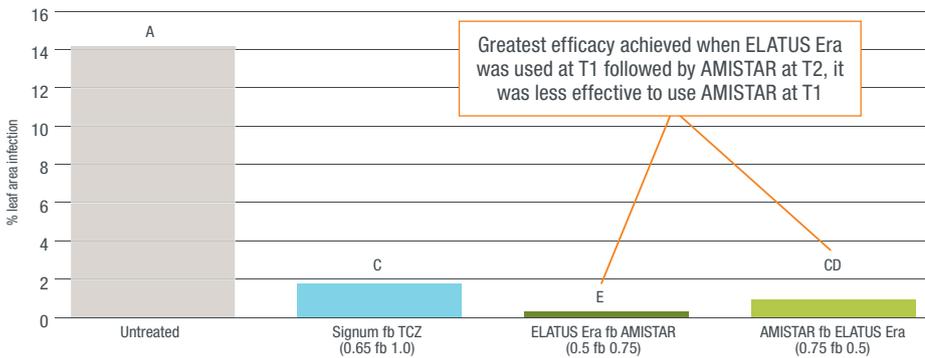
ELATUS ERA PROVIDES OUTSTANDING CONTROL OF RUST

In recent seasons Bean rust (*Uromyces fabae*) has been a major threat to winter and spring bean crops. However, Chocolate spot (*Botrytis cinerea*) can also devastate crops given conditions conducive to disease development. ELATUS Era can effectively tackle both of these troublesome pathogens. It provides growers with a new tool to help with disease management to optimise yield and quality.

The outstanding control of Rust offered by ELATUS Era was demonstrated in a spring bean field trial by PGRO. The trial had two applications: T1 (GS60-63) and T2 (GS69-75). The trial used the cultivar Lynx and was drilled on 20 March 2020. The aim of the trial was to establish if it was best to start the fungicide programme with ELATUS Era and to compare with the current standard.

The data shows that ELATUS Era (T1) followed by AMISTAR (T2) was more effective at preventing the development of Rust than the standard of Signum (T1) followed by Custodia (T2). These outstanding results were obtained even though ELATUS Era was applied at the reduced dose of 0.5 l/ha and AMISTAR at 0.75 l/ha.

ELATUS ERA CONTROL OF RUST (*UROMYCES SP*) IN SPRING FIELD BEANS ASSESSED 28 JULY



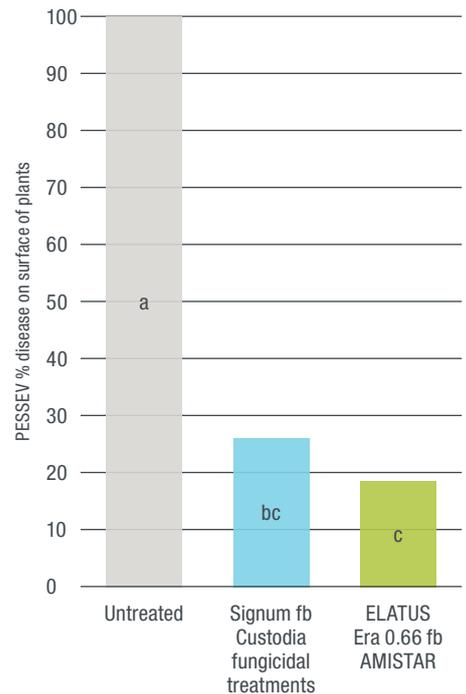
Source: PGRO Flawborough site 2020. T1 application: flowers on lower trusses, GS60-63, 8 June. T2 full flower, approaching full canopy, GS69-75, 10 July

2021 TRIALS ON CHOCOLATE SPOT

The 2021 season provided the most favourable conditions for the development of Chocolate spot for several years. A trial at the Rougham trials demonstration site provided a particularly tough challenge for bean fungicides. The crop, in this case was winter beans (variety Tundra) and the trial clearly showed the effectiveness of ELATUS Era against this disease. But this disease can infect spring beans as well as winter beans.

The trial tested several two spray programmes and compared using ELATUS Era at T1 and AMISTAR at T2 with Signum T1 followed by Custodia at T2. The data showed that using ELATUS Era at the recommended dose of 0.66 l/ha followed by AMISTAR was the most effective programme for reducing Chocolate spot infection.

ELATUS ERA FB AMISTAR - EXCELLENT CONTROL OF CHOCOLATE SPOT



Source: Syngenta Rougham trial 2021

APPLICATION ADVICE FOR FUNGICIDES AND INSECTICIDES

3D nozzle alternating forward and backward along the boom for improved coverage.

Alternatively in compromised conditions use the AMISTAR nozzle when operated at 1.5 bar pressure.

In denser crops coverage can be increased by using higher water volumes, but do not exceed 200 l/ha.

