



Operation Pollinator



Positive Action
for Pollinators

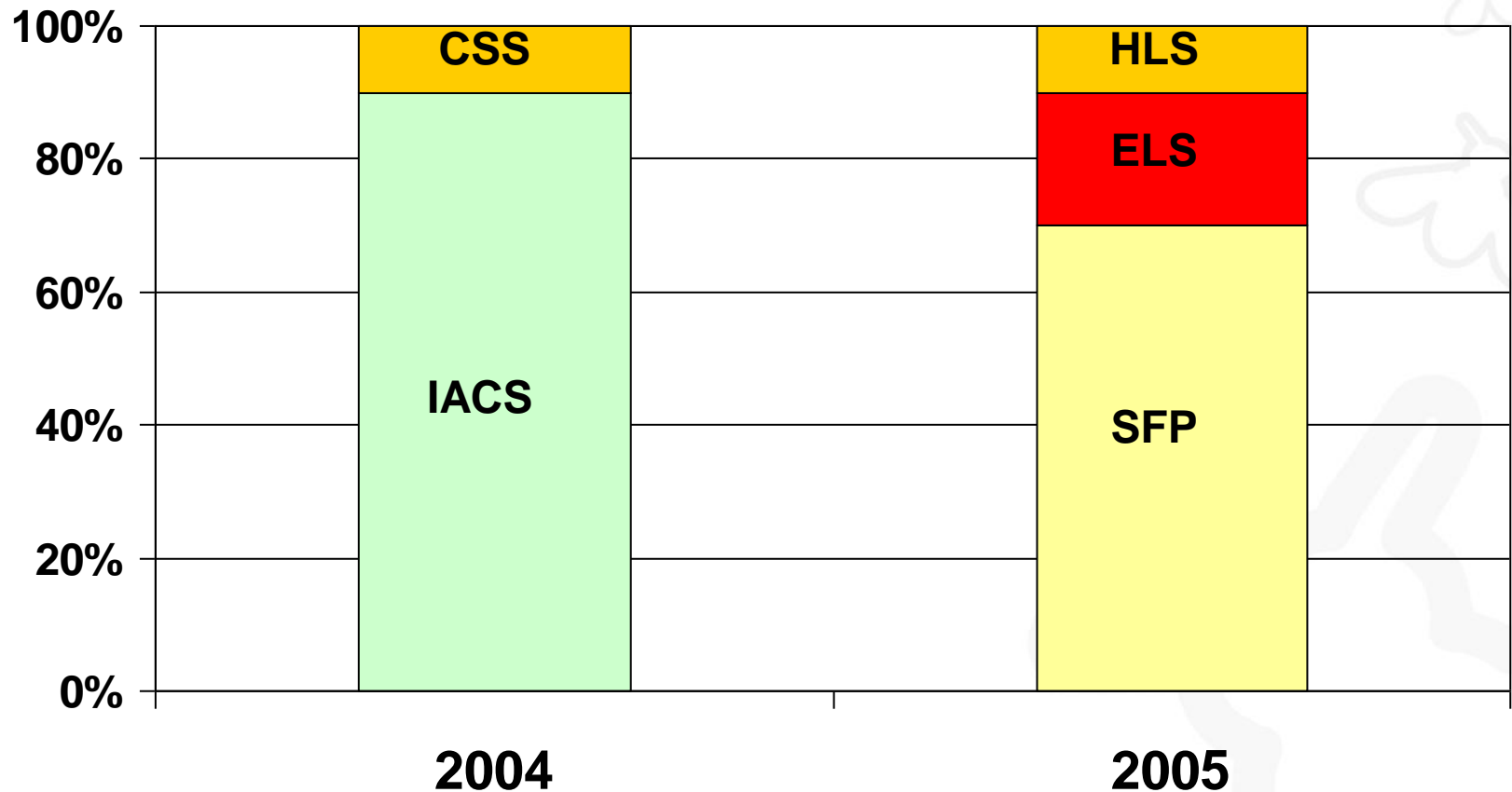
Geoff Coates Syngenta

8/16/2010

syngenta.

www.operationpollinator.com

Changes in Distribution of Payments



HLS = Higher Level Stewardship
ELS = Entry Level Stewardship
SFP = Single Farm Payment

Where it all began 2001-06



The Buzz Project



Wildlife Farming Company
- Proven Wildlife Delivery -



Centre for
Ecology & Hydrology
NATURAL ENVIRONMENT RESEARCH COUNCIL

Objectives

- Increase biodiversity and retain farm profitability
- Project replicated across 6 sites
- 7 habitats compared
- Examine impact of habitat creation and management techniques on a wide range of plants and animals



Habitats

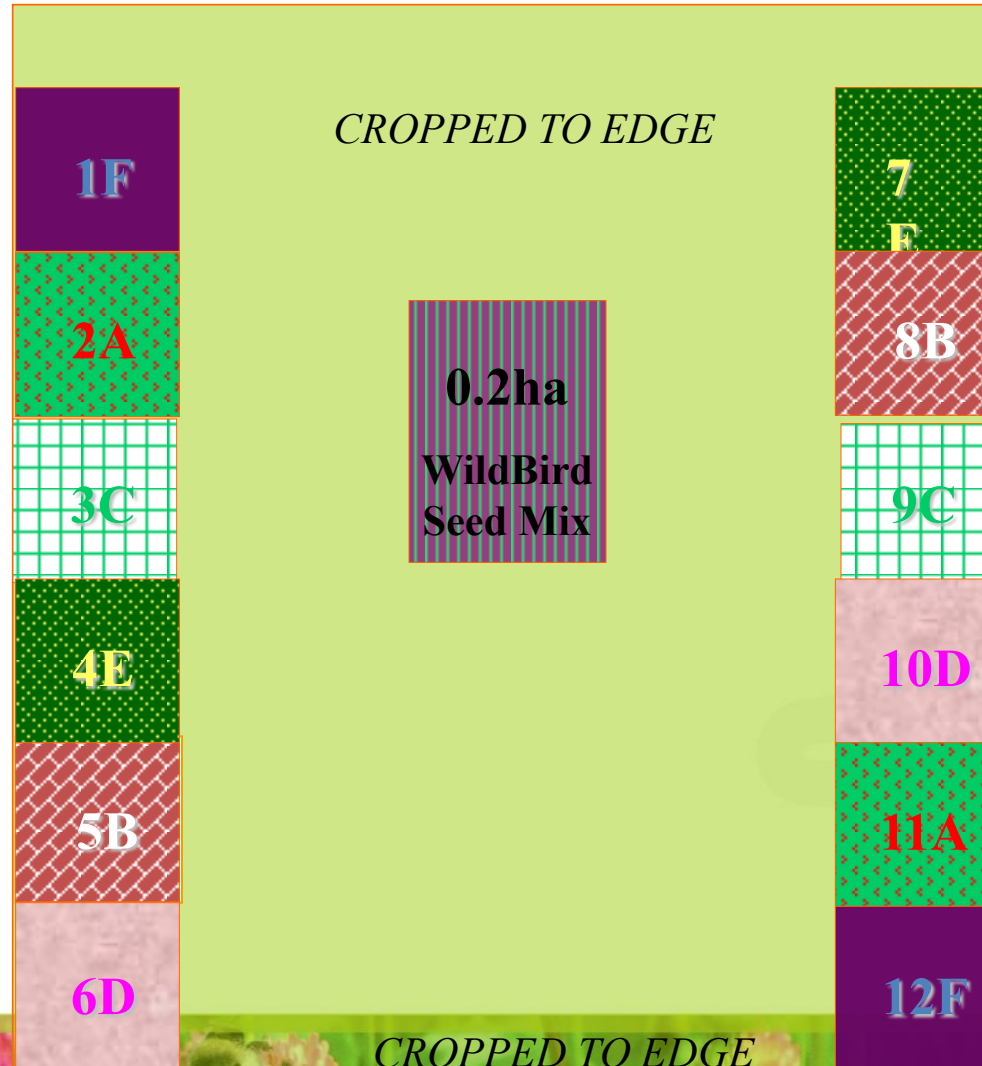
A Site Plan

Each plot 6 meters wide x 50 meters long



Randomisation of plots will vary from site to site

- A. Crop - Winter Wheat
- B. Tussocky mix
- C. Flowery mix
- D. Legume Mix
- E. Natural Regeneration
- F. Conservation Headland



Crop and Conservation Headlands



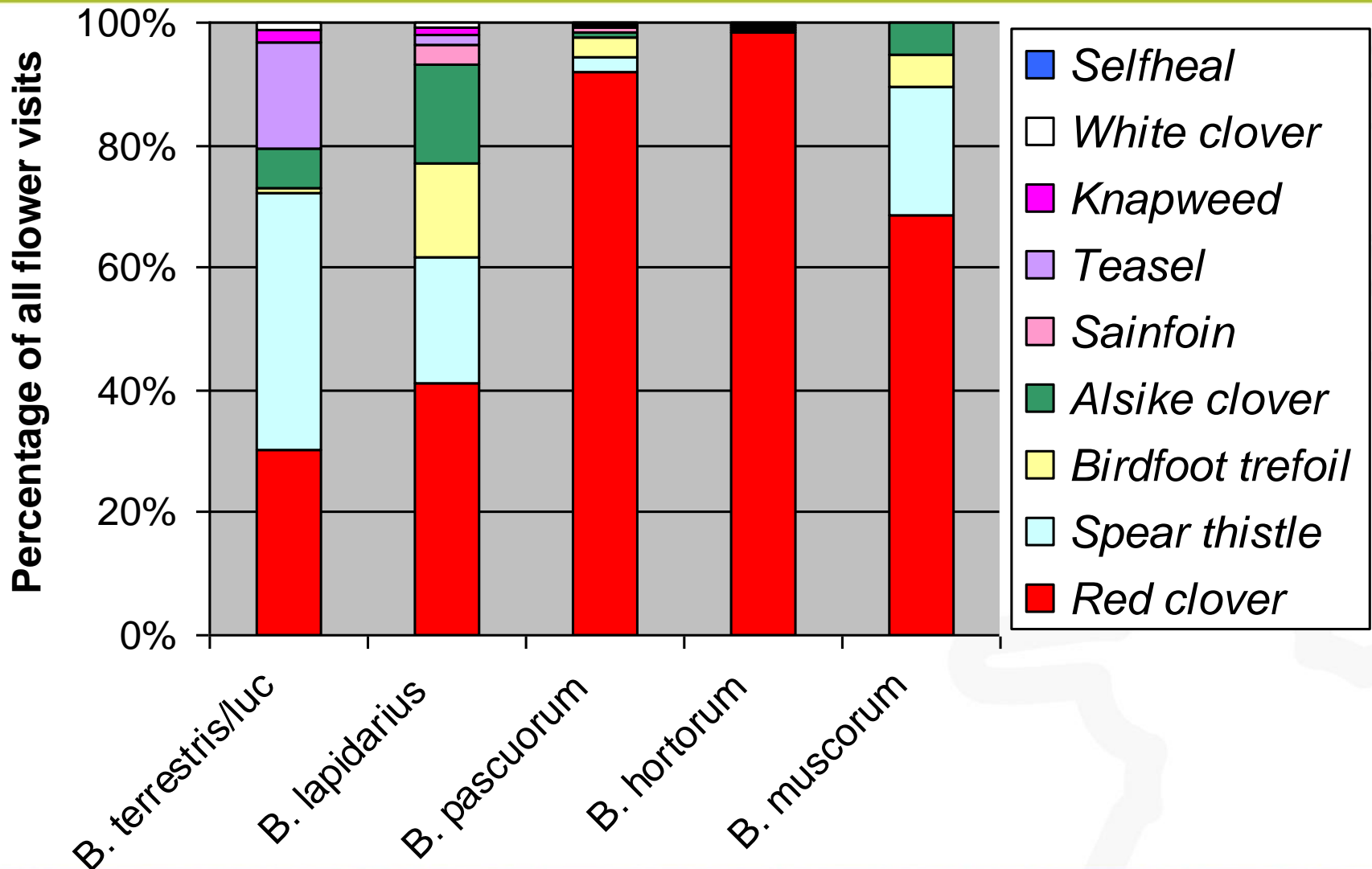
Natural Regeneration and Tussock Grass Mix



Wild flower and Pollen & Nectar Margins



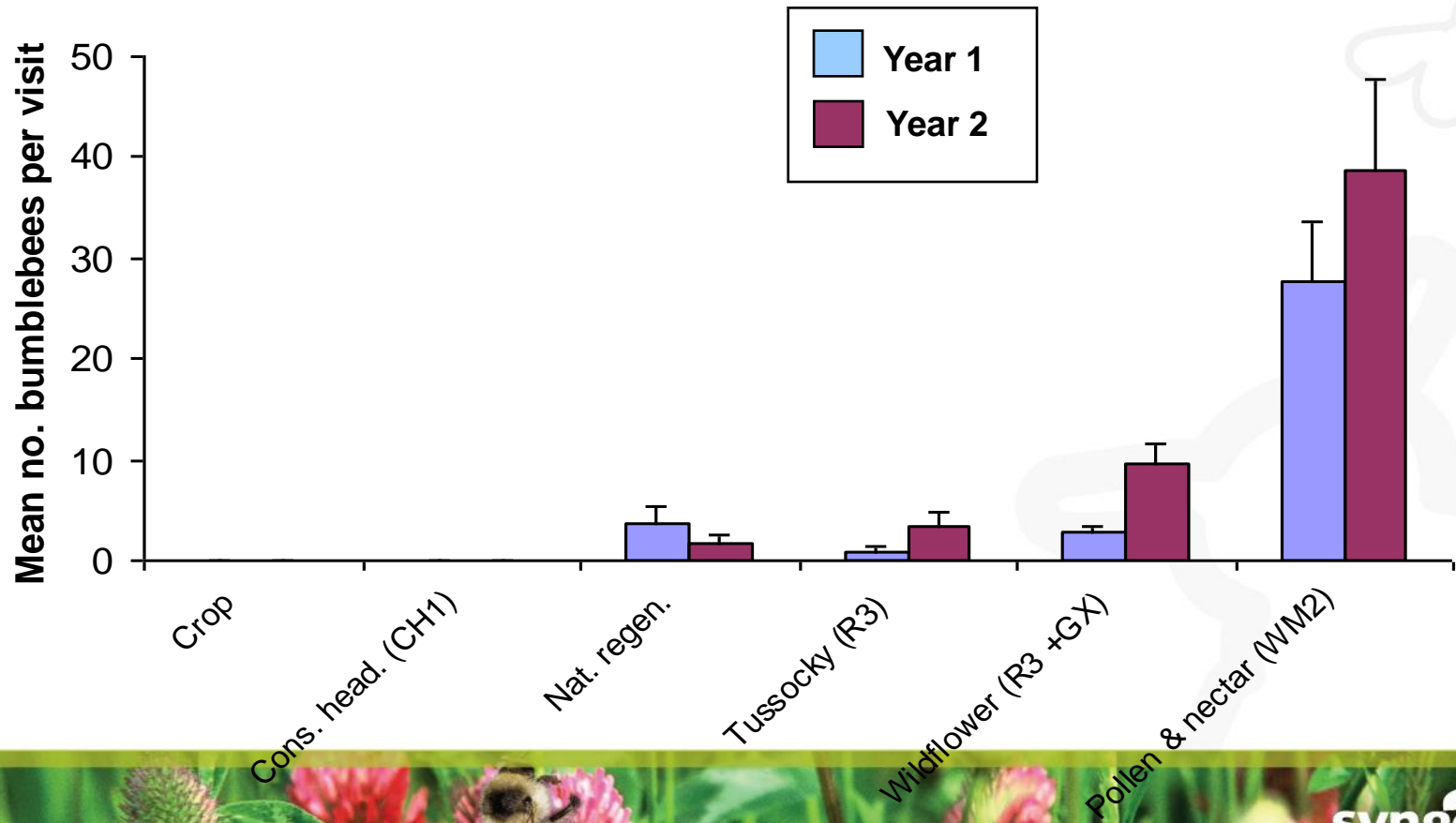
Bumblebee food plant preferences 2003



Buzz Results



Buzz Project Results – Bumblebee abundance



Why the Bumblebee?



- Over last 40yrs in UK 97% of farmland pollen & nectar sources lost

- the Bumblebee was in decline in UK
- One of Nature pollinators

CAP reform – greening of European Ag

- Can Syngenta access this changing environment? Buzz Project
Yes - Bumblebees respond quickly”

- Bumblebee is a BAP indicator species for UK Government

- Demonstrate that sustainable, profitable food production and a vibrant countryside can sit side by side IN THE SAME FIELD!



Operation Bumblebee 2005-2008



Why Operation Bumblebee 2005-08 for Syngenta ?



- Greening of the “ CAP”
- New Agricultural Revolution Mar-05 = SFP / ELS /HLS
- Go to Market Strategy in the UK
- Sustainable Profitable Agriculture in UK
- Corporate and Social Responsibility
- On Brand
- Knowledge transfer from Buzz + Seed mixtures
- Pilot Aug 04 & Launch OBBee Autumn 2005 to UK Press
- Pan European?



Operation Pollinator Legume Only



Operation Bumblebee - Syngenta Commitment



- Regional Environmental Training at Centres across the UK (1 day Farmer training course – knowledge transfer from Buzz -incl. mixtures, site, sow, management, ES -fit)
- Operation Bumblebee Training Pack
- Bumblebee ID guide & Poster
- OBBe Signs
- Topical in-season updates
- Phone Support
- Web Site <http://www.operationbumblebee.co.uk>
- **Farmers commitment for training to sow 1 ha of mix on their farm record site and manage the mixture**



Monitoring



Monitoring of both Pollen & Nectar and existing farm margins took place across the UK – Mike Edwards et al



Operation Bumblebee 2005 -2008 Results



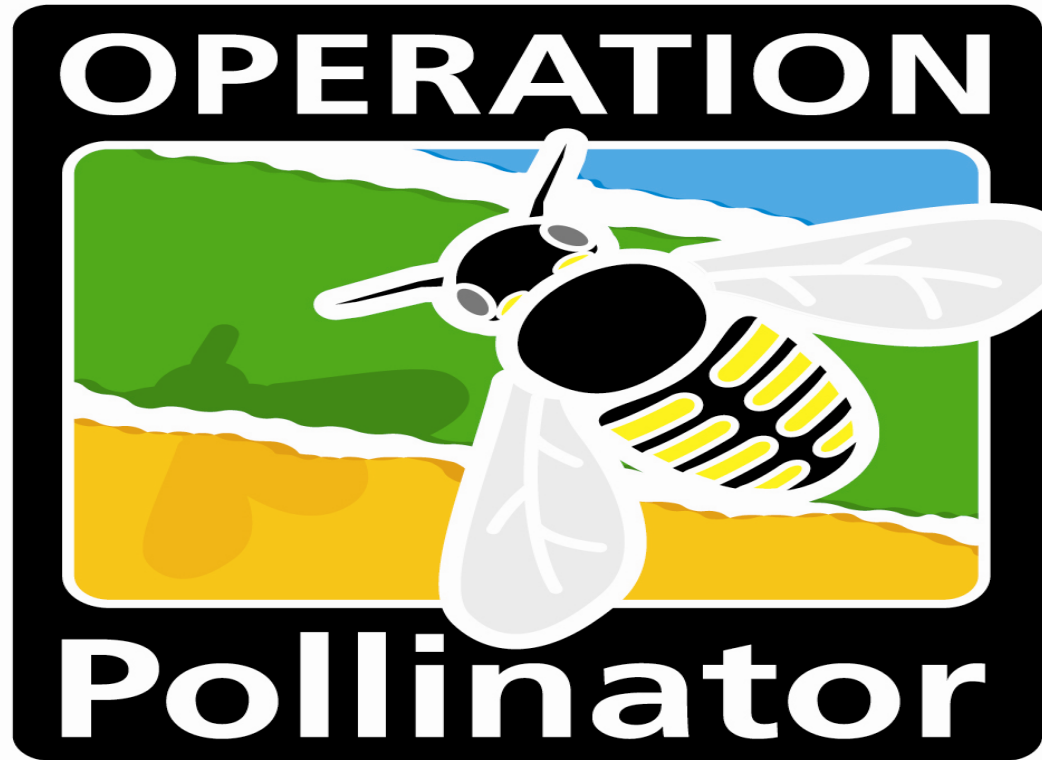
- Over 1200ha's of seed mix sown in 3 yrs
- Over 600 farms signed up to the project & trained across NI, Scotland and England
- Significant sustainable effect for the Bumblebee on over 20 % of UK arable land
- Return of *Bombus ruderatus*
- Still demand in 2010 every week from farmers
- Supermarket buy-in for Fresh Produce.



Bombus ruderatus



Operation Pollinator 2008 - 2013



Operation Pollinator – the next step in Europe



- Pollinators are in decline across Europe
- Changes in Cropping patterns
- Gov. Policy
- More than 80% of European crop types are dependent on insects for pollination
- Pollination by native bees and other pollination insects is worth €5bn to European farmers
- Est value of Pollinator Services Globally is \$150bn



And why change to a new name and logo?



From



to



- Every project is unique! It is now a trans-continental project!
- Bumblebees not always key pollinators in every country
- Delivery of landscape biodiversity and pollination services
- Design changes registered as TMs in EU, USA & Australia



So what have Syngenta done in Europe in 2009 -10

- Now 13 (incl.UK)countries has:-
- Year 1 - Operation Pollinator Team = Syngenta Staff + external consultants. Est. 3 farms per country – sown mix – range of crops.
- Year 2 - Train Staff to establish habitat & develop Specific Pollinator Seed mixtures & protocols per country. (already UK1200,Italy200,Germany 600 farmers involved)
- Year 3 + Train Farmers / Agronomists - rollout on landscape scale & to fit with Agri.Envir. Support
- Monitoring team & reporting per year



Small mining bee (genus: *Lasioglossum*) on Melon flower in France



Megachile visiting legumes



Flowering Period - Operation Pollinator Italian Mix



Species	Italian Flowering Period
<i>Hedysarum coronarium</i> L.	■
<i>Lotus corniculatus</i> L.	■
<i>Medicago sativa</i> L.	■
<i>Onobrychis viciifolia</i> Scop.	■
<i>Trifolium pratense</i> L.	■
<i>Trifolium repens</i> L.	■
<i>Brassica napus oleifera</i>	■

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Portugal – Establishment and delivery



ELS Pollen & Nectar Margin



Operation Pollinator Grass & Wildflower



Combinations – Sandwich Margin



Operation Pollinator Offer



- OP Training Day for Agronomists
- OP Training Day for Farmers
- Operation Pollinator Seed mixtures
- (+Wild Bird Seed mixtures)
- Partnership Plan – Seeds offer
- Syngenta 8 Platform Site Demo in UK
- Syngenta Environmental Network-
Syngenta Staff,WFC,M.Edwards,Seed Houses



Together making a difference !

