

MONSANTO



THE PLACE FOR PESTICIDES

Barrie Hunt

Technical Development Manager

Monsanto UK Ltd.

WHY USE PESTICIDES?

- **Stories of protecting crops and feeding the world are well established and largely understood.**
- **Lots of websites explaining/justifying such uses.**
- **However, amenity use is often just a foot note, a single sentence on a webpage.**



Source: CPA Pesticides in Perspective

WHY USE PESTICIDES?

We have a real story to tell!

- ✓ **Reducing road traffic accidents**
- ✓ **Help trains and planes run on time**
- ✓ **Enabling our utilities to operate safely and effectively**
- ✓ **Ensuring surfaces and structures remain intact**
- ✓ **Flood prevention and effective drainage**
- ✓ **Ensuring tip-top quality venues for a wide range of outdoor sports from golf to rugby, football to fishing.**
- ✓ **Creating a pleasant and appealing urban environment**
- ✓ **Controlling invasive species and protecting our biodiversity**
- ✓ **Helping manage nature reserves and the natural environment**

WHY USE PESTICIDES?

1. **Effective control of weeds, pests and diseases**
2. **Convenient to Use**
3. **Safe**
4. **Targeted**
5. **Fast**
6. **Cost effective**
7. **Low environmental impact**



EFFECTIVE CONTROL



Untreated

Treated

Glenborrodale, Argyll



Environmental Science

CONVENIENT TO USE

- Just add water!
...or maybe not even that!
- Packaging has improved significantly.
- Easy mix
- Easy rinse
- Easy disposal
- Clear label directions
- Improvements in application technology



MONSANTO



SAFE

- Pesticide registration involves rigorous scrutiny by independent scientific experts to ensure products pose no unacceptable risks to people (including users, local residents and bystanders), wildlife and the environment. Even once approved product use is constantly monitored and periodically reassessed. Approvals can be revoked at any time!
- Operator and bystander safety is paramount. Effective training and assessment of both advisers and spray operators, and adherence to Best Practice guidance, helps to ensure that all reasonable precautions are taken to protect human health and the environment.



Source: CPA Pesticides in Perspective

MONSANTO



TARGETED

- Increasingly we are able to carefully target the use of pesticides:
 - Spot spraying
 - Selective applicators
 - Ecoplug
 - Stem injection

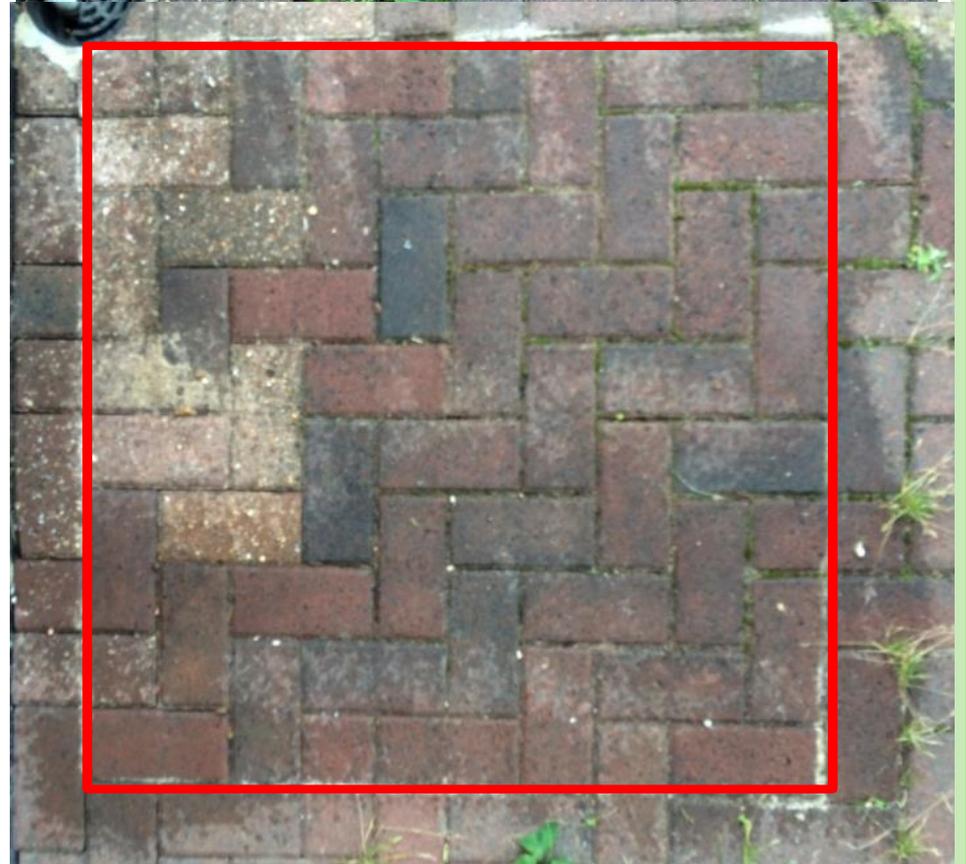


- Product selectivity enables specific problems to be addressed:
 - Broad-leaved weeds in turf and amenity grass
 - Brown-tailed moth caterpillars amongst beneficial insects



FAST

- Spraying is faster than hand weeding or other mechanical methods.
- Time taken to hand weed 1m² of block paving:
06 min: 38.22sec
- Time taken to spray 1m² of block paving (*with water!*):
00 min: 11.33sec



COST EFFECTIVE

- Using pesticides to control weeds, pests or diseases can be significantly less expensive and more cost effective than using hand or mechanical methods.
- Cost effective weed control!
- For example,
- Cost effective disease control!
- For example,

Roundup ProVantage

Target	Cost/m2	Cost/ linear km
Annual grasses and broad-leaved weeds	£0.0018	£1.80
Perennial weeds	£0.003	£3.00

Chipco Green

Target	Cost/m2	Cost/ average golf green*
Broad-spectrum turf diseases	£0.07	£24.50

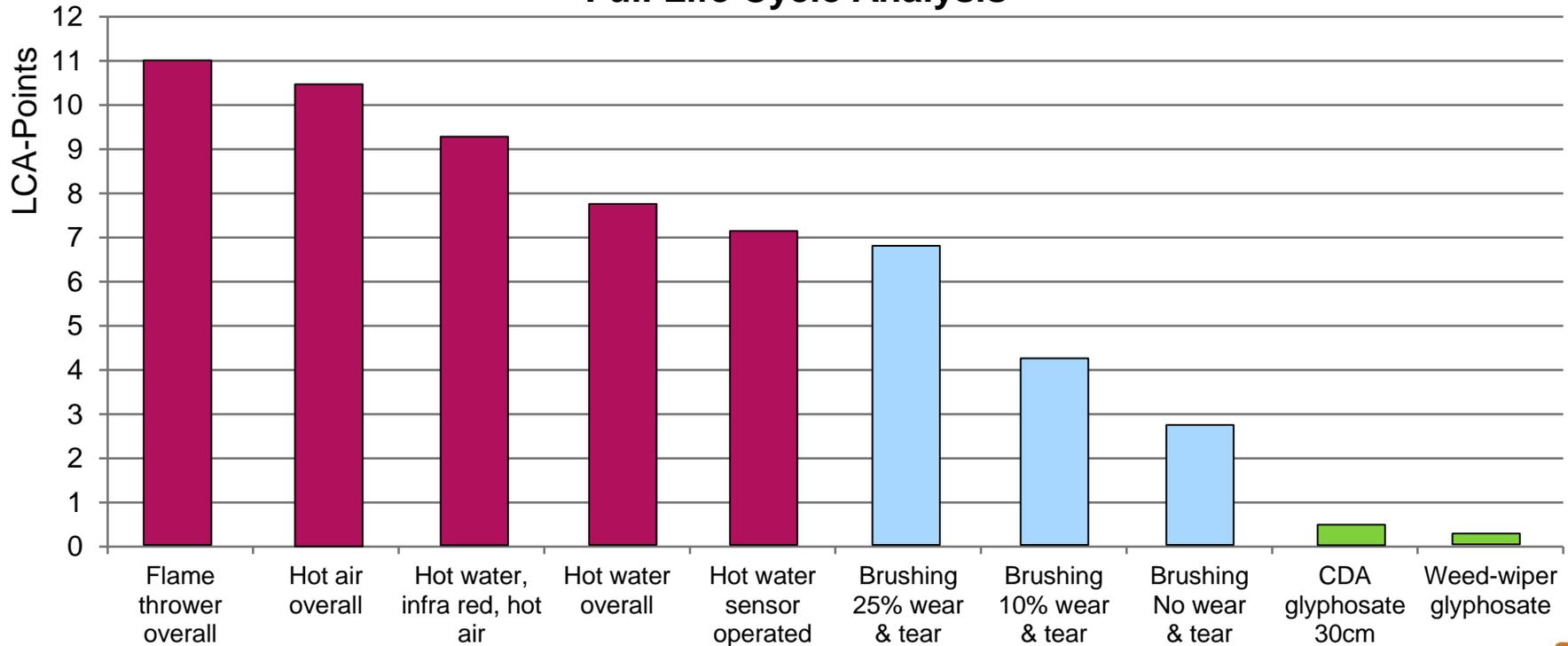
*average is 350m²

LOW ENVIRONMENTAL IMPACT

- Detailed study undertaken in Netherlands to determine the environmental effects of the most common weed control methods on hard surfaces, such as pavements and roads.
- Research by University of Wageningen, University of Amsterdam and IVAM Research
- Full lifecycle analysis
Categories assessed: fossil fuel depletion, metal depletion, natural land transformation, agricultural and urban land occupation, human toxicity, freshwater, marine and terrestrial ecotoxicity, freshwater eutrophication, terrestrial acidification, climate change impact on human health and on ecosystems, ionising radiation, particulate matter formation, photochemical oxidant formation, and ozone depletion.
- Applied points for each category assessed to give a final score.

LOW ENVIRONMENTAL IMPACT

Full Life Cycle Analysis



MONSANTO



Source: Jonkers, N., 2012. IVAM Research and consultancy on sustainability, Rapport 1217v, Amsterdam

UNDER THE MICROSCOPE!

- ✓ **Public-facing face of pesticide use.**
- ✓ **No room for poor practice.**
- ✓ **Under the spotlight.**
- ✓ **Effective stewardship is key!**
- ✓ **Follow Best Practice**
 - ✓ **Code of Conduct...**
 - ✓ **Amenity Assured**
- ✓ **Importance of Amenity Forum, INNSA, PCA, CPA etc.**

SUMMARY

- Amenity use of pesticides plays a key role in maintaining the quality and safety of our community and public spaces.
- They provide effective and targeted control of weeds, pests and diseases.
- When used in accordance with the label they are safe and convenient.
- They are more cost effective and faster than hand or mechanical techniques.
- Many have a low environmental impact.
- The Amenity sector is the public-face of pesticide use.
- Always follow Best Practice.

THANK YOU!

Barrie Hunt
Technical Development Manager
Monsanto UK Ltd.