

# Weed Control best practice guidelines for control and budget

Dónall Flanagan, Teagasc  
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# What does good weed control on a budget look like ?

- ▶ Effective
- ▶ Requires limited management
- ▶ Safe
  
- ▶ Good control will cost
  - Time
  - Labour
  - Equipment/ resources

# Best practice

- ▶ Trial first
- ▶ Irrigate before application
- ▶ Remove all weeds from older stock before weeding
- ▶ Carry out in good time – not when weeds are mature
- ▶ Read the label
- ▶ Prepare equipment and calibrate when required
- ▶ Uniform application
- ▶ Irrigate after
- ▶ Maintain the herbicide barrier
- ▶ Maintain records







# Good house keeping

- ▶ Some on-site weed sources include substrate, pot storage areas, reused containers, area immediately around crops, roadways, and liners.
- ▶ Keep substrate piles weed free.
- ▶ Use new or clean containers.
- ▶ Keep propagation areas weed free.
- ▶ Clean beds between crops.
- ▶ Treat non-crop areas for weeds.
- ▶ Start with clean liners.
- ▶ Get rid of old, weedy stock or keep them clean.

# Hand weeding

- ▶ *“hand weeding every 2 weeks instead of waiting until pots became “weedy”, reduced overall labour costs by an average of 36%.”*
- ▶ Joe Neal <https://weeds.ces.ncsu.edu/>
  - *“when pots were hand-weeded every two weeks the cumulative amount of weeds removed was reduced by an average of 74% compared to when pots were weeded just before herbicides were re-applied at 8-week intervals. More importantly,*

# Hand weeding costs

► €10 per hour  
50,000 pots

Near clean pots  
€390

50% cover  
€2555

100% weed cover  
€5555

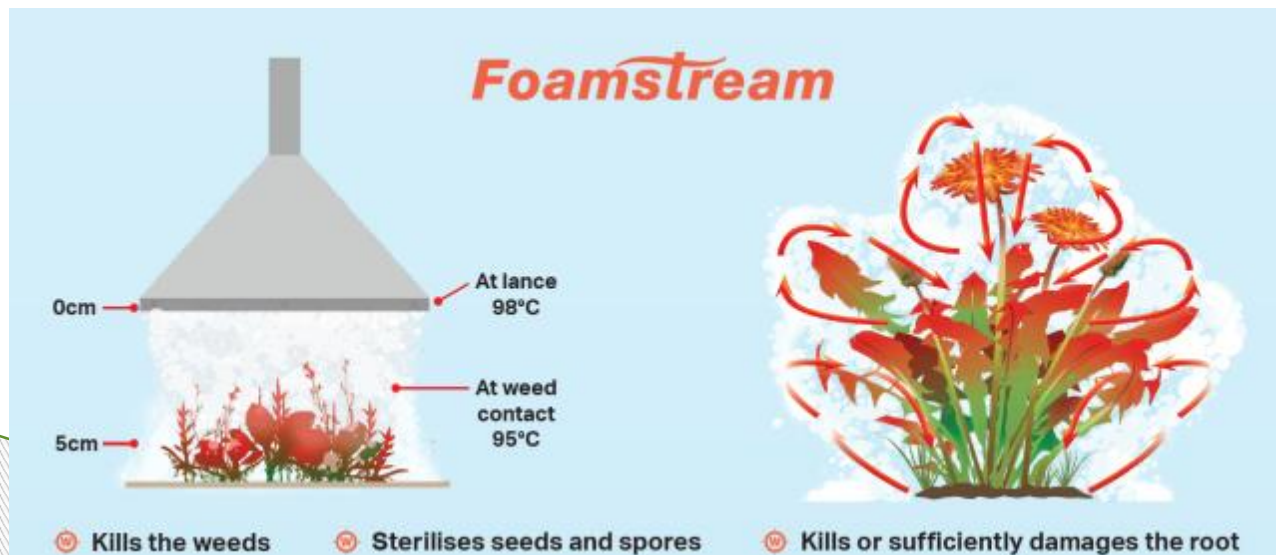


# Sterilization

## ► Chemical

- Basamid/ dazomet
- Trade sales end by end of December 2019
- Use up end of December 2020
- 220Kg/ha to 570kg/ha out doors = €1700–€4,400

## ► Steam







# Pelargonic acid

- ▶ High volume application
- ▶ expensive



# Mechanical weeder

- ▶Brushes
- ▶Springs
- ▶Harrow
- ▶hoe



# Mulch

- ▶ Self forming
- ▶ Loose fill
- ▶ Discs
- ▶ Cost per 2L pot €0.07–€0.15



# Landscape residual weed control

- ▶ Is it a good idea?
  - Phytotoxicity
- ▶ Non crop areas
- ▶ Cost of residuals per ha per year

# Container

- ▶ Protected options
  - Sencorex / Metribuzin
  - Flexidor 500
  - Mogeton
- Use up by 30th June 2020
- Sumimax
- Protected bulbs and seedlings only

# Metribuzin trial 2019

	Actives	Rate/ha	total treatment cost ex labour
Flexidor	Isoxaben	0.4	€152
Sencorex	Metribuzin	1x1.15	€54.22
Sencorex	Metribuzin	2x0.575	€54.22
Sencorex	Metribuzin	4x0.2875	€54.22

# Metribuzin trial 2019





# Metribuzin trial 2019

Phytotoxicity			Flex	Sencorex full	Sen half	Sen quarter
	control	pot top	1	2	3	4
ABELIA "GRANDIFLORA EDWARD GOUCHER"	1	0	1	4	4	5
AJUGA "REPTANS BRAUNHERZ "	1	0	1	3	4	3
BERBERIS "DARWIN NANA"	0	0	0	5	5	5
CEANOTHUS REPENS'	1	0	0	5	5	5
COTONEASTER "MICROPHYLLUS"	1	1	1	2	1	1
EUONYMUS "BRAVO"	0	0	0	4	4	3
HEBE "SUTHERLANDII"	0	0	0	5	5	5
ILEX "AQUIFOLIUM SILVER QUEEN"	0	0	0	2	0	0
LEPTOSPERMUM "WINTER CHEER "	1	1	0	1	0	1
LONICERA 'MAY GREEN "	0	0	1	0	1	0
LOPHOMYRTUS "MAGIC DRAGON"	0	0	0	4	5	5
PACHYSANDRA "TERMINALIS"	0	0	0	0	1	1
PITTOSPORUM "TENUIFOLOUM"	0	0	0	5	5	5
PRUNUS "LAUR ROTUNDIFOLIA ETNA "	0	0	0	1	1	2

# Field trial 2018 –pre emergent on seed beds

- ▶Seed sown 24th May
- ▶Sprayed 28th May

	Roxy 80 + Proman	Prosulfocarb + Metobromuron	4l/ha + 2L	€97.40
	Cadou Star + Stomp Aqua	Flufenacet + Isoxaflutole + Metobromuron	.85Kg/ha + 2L	€70.35
	Wing P + Cadou Star	Pendimethalin + Dimethenamid + Flufenacet + Isoxaflutole	4L + .85Kg/ha	€101.43
	Wing P + Proman	Pendimethalin + Dimethenamid + Metobromuron	4l/ha + 1L	€82.60
	Wing P + Proman + Centium	Pendimethalin + Dimethenamid + Metobromuron + Clomazone	2L + 2L + 0.2	€140.60

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1	Roxy 80 + Proman	Prosulfocarb + Metobromuron	4l/ha + 2L	€97
2	Cadou Star + Stomp Aqua	Flufenacet + Isoxaflutole + Metobromuron	.85Kg/ha + 2L	€70
3	Wing P + Cadou Star	Pendimethalin + Dimethenamid + Flufenacet + Isoxaflutole	4L + .85Kg/ha	€103
4	Wing P + Proman	Pendimethalin + Dimethenamid + Metobromuron	4l/ha + 1L	€83
5	Wing P + Proman + Centium	Pendimethalin + Dimethenamid + Metobromuron + Clomazone	2L + 2L + 0.2	€141



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# Field trial 2018 – post emergent

- ▶ Follow up 3rd August
- ▶ Knock down of newly germinated weeds
  - Higher pressure in some sections
- ▶ Both caused phytotoxicity but grew away with 6–8 weeks

	04266	Lenacil + Phenmedifam + Desmedipham + Ethofumesate	1.5L	€51.75
	04450	Metobromuron	0.5L	€16



# Spring 2019



# Beech Seed Summer 2019

	Increase d Stomp	Cadou Star + Stomp Aqua	Flufenacet + Isoxaflutole + Metobromuron	.85Kg/ha + 2.9L	€91
	Standard	Wing P + Cadou Star	Pendimethalin + Dimethenamid + Flufenacet + Isoxaflutole	4L + .85Kg/ha	€103
	Increase d proman	Wing P + Proman	Pendimethalin + Dimethenamid + Metobromuron	4l/ha + 2L	€132
	2019	Wing P + Cadou Star + Roxy	Pendimethalin + Dimethenamid + Flufenacet + Isoxaflutole + Prosulfocarb	4L + .85Kg/ha + 5L	€165
	2019	Wing P + Proman + Roxy	Pendimethalin + Dimethenamid + Metobromuron + Prosulfocarb	4l/ha + 2L + 5L	€180



# Winter clean up 2 + 0

► Very heavy weed pressure

► Sprayed 27/2/19

Name	Active	rate / hectare	cost /Ha
Kerb Flo	Propyzamide (400g/L)	4.25L	€ 122
Monitor	Sulfosfuron 80%	25g	€ 29
Roxy 800	Prosulfocarb	5L	€ 63
Stomp 400	Pendimethalin (400g/L)	2.9L	€ 52
Stratos Ultra	Cycloxydim	4L	€ 136
Sumimax	Flumioxazin (300g/L)	0.1L	
Fusilade	fluazifop pp butyl	3L	€ 176

# Winter clean up – 2020

## ► Beech

Treatment	Herbicide	Weed cover
1	Kerb Flo	38%
2	Monitor	7%
3	Roxy 800	36%
4	Stomp Aqua	44%
5	Stratus Ultra	50%
6	Sumimax	33%
7	Control	86%
8	Fusilade	70%



# Winter clean up – Laurel transplants

Treatment		Weed cover
1	Kerb Flo	
2	Monitor	29%
3	Roxy 800	
4	Stomp Aqua	47%
5	Stratus Ultra	60%
6	Sumimax	
7	Control	72%
8	Fusilade	67%





# “New” residual for non crop area

► Valdor flex



# Action points

- ▶ Good house keeping
- ▶ Timely hand weeding
- ▶ Select the most effective herbicide
  - Few on label choices
- ▶ Apply herbicides at the right time
  - After potting/ before weeds germinate
- ▶ Apply herbicides uniformly (easier said than done).
- ▶ Calibrate your spreader.
- ▶ Mulches can be effective and cost-effective

# Sources of information

- ▶ Joe Neal
  - North Carolina State University
  - <https://weeds.ces.ncsu.edu/>
- ▶ Heinrich Loesing
  - VUB Germany

**If applying a herbicide for the first time carry out a small trial first**