



New and Emerging Products for IPM

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intelligro[™]



What is IPM (Integrated Pest Management)?

Definition of IPM

IPM is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and nontarget organisms, and the environment. **University of California Agriculture and Natural Resources**

Integrated pest management

From Wikipedia, the free encyclopedia

Integrated pest management (IPM), also known as **integrated pest control (IPC)** is a broad-based approach that integrates practices for economic [control of pests](#). IPM aims to suppress pest populations below the economic injury level (EIL). The UN's [Food and Agriculture Organization](#) defines IPM as "the careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment. IPM emphasizes the growth of a healthy crop with the least possible disruption to agro-ecosystems and encourages natural pest control mechanisms."^[1] [Entomologists](#) and [ecologists](#) have urged the adoption of IPM pest control since the 1970s.^[2] IPM allows for safer pest control.

Sustainability



Sustainability – What is it?

- Blending the economic, environmental and social factors to meet new market expectations & regulations in ways that strengthen a company' strategy, competitive advantage, profitability & brand

Incorporating environment, health and social value into a company's core business with no trade-off in profits, price or quality

Sustainability – What's driving it?

- Declining Natural Resources
- Increased Regulations and Compliance (need to take a proactive approach)
- Transparency – instant access to information
- Demographics
 - Boomers – want to leave a legacy and leave the planet in better shape
 - Millennials – want to do more with less
- Population and Climate Changes

How Does Sustainability Impact your Business?

- Embedded into a company's "why" - drives strategic decisions and leads to a highly profitable and differentiated business model
- A Mega-Trend -- Not just a short term fad – sustainable solutions deliver immediate value to your business and your customers
- Sustainability is not about compromise – it's about effective solutions that are beneficial to your business and the planet

The Value of a Sustainable Approach – External

Examples:

- Total organic sales for sod farms in 2015 increased by 13% to \$6.2B
- Value of sustainable propagative and control products in 2015 increased by 127% to \$19.9M
- Green market is growing at a substantial rate of 32%
- Market Size >\$200 Billion; Growing at 18% per year.



Health
Canada

Santé
Canada

Your health and
safety... our priority.

Votre santé et votre
sécurité... notre priorité.

Chlorothalonil

Amendment to the Proposed Re-evaluation Decision

*Based on the revised occupational and residential risk assessments for chlorothalonil, the PMRA has determined that under the revised conditions of use, some agricultural uses of chlorothalonil do not present unacceptable risks to human health. **Based on the human health risk assessment, the PMRA is proposing to cancel the following uses of chlorothalonil:***

*Agricultural uses: blueberry, highbush; blueberry, lowbush; celery, field; cherry (sweet and sour); chickpea; Cole crops; conifers (outdoor and nursery beds); corn, sweet; cranberry; evening primrose; lentil; nectarine; onion (dry and green); ornamentals (greenhouse and outdoor); pea, dry; peach; wheat; and **turf (except for control of snow mould).***

About the County Pesticide Law

The County's Pesticide Law restricts the use of certain pesticides on private lawns, playgrounds, mulched recreation areas, and childcare facilities. Most synthetic pesticides are not allowed to treat pests in lawns.

Weeds and pests can be prevented by practicing organic lawn care, which should not require the use of any chemicals. Our [extensive webpages](#) highlight the tips and tools for successful organic lawn care.

Only organic or minimum-risk pesticides are allowed for use on lawns, playgrounds, mulched recreation areas, and childcare facilities. [Some exemptions apply.](#)

What's
Banned



Purpose
of the Law



Signage
Regulations



Suppliers are
Transactional...

Winners are
Transformational





Selling a Commodity
does nothing...

To establish Trust

Selling is the transfer of Trust.

Trust trumps price





SAMENESS & DIFFERENCE

Selling a [commodity]
transforms you into a **supplier**

[instead of a **trusted business partner**]

Sell a **Solution** [program]

NOT

A Product

The word "solution" is rendered in a large, white, 3D sans-serif font. It is positioned in the lower half of the image, set against a solid blue background that has a wavy, torn-paper-like edge at the top. The letters have a slight shadow, giving them a three-dimensional appearance as if they are floating or attached to the background.



SAMENESS & DIFFERENCE

Selling an **innovative**
[solution] creates trust &
transforms you into a **TBA**
[trusted business advisor]
[best place to be]



CIVITAS TURF DEFENSE™ CAN HELP YOUR COURSE GO ORGANIC

There are plenty of risks and rewards to consider before deciding to go organic. See what it takes to successfully make the switch, and find out why **CIVITAS TURF DEFENSE** is the perfect partner for your organic program.

The Challenges of Going Organic

1. Expect your maintenance budget to increase by 20-25% when agronomic practices like topdressing, cultivation, rolling and seeding with improved cultivars become mandatory.
2. Organic materials cost more than synthetic materials and tend to be more diluted, which means shipping costs will rise with increased volumes.
3. Additional cultivation equipment and labor will be required as you implement weekly spraying and topdressing regimens.

The Benefits of Going Organic

1. Reduced pesticide exposure to all who enter the property.
2. Enhanced protection of water quality and drinking water supplies.
3. Added support for pollinators.
4. Promoted biodiversity in the soil and canopy.



DEFEND YOUR TURF TODAY BY
VISITING CIVITASTURF.COM

What's the best strategy for a successful switch?

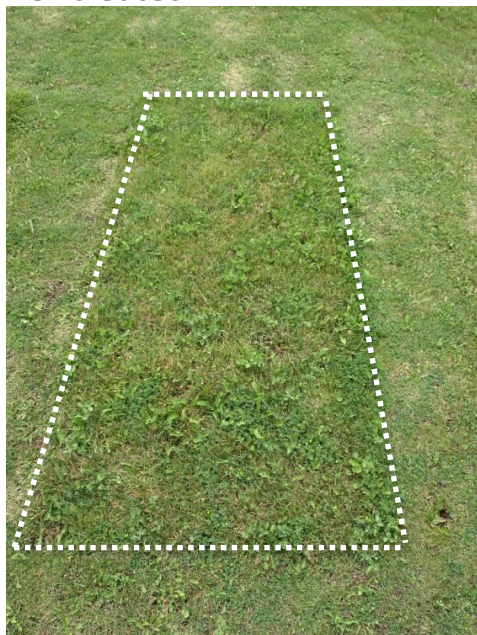
Transitioning to organic turf management requires discipline, consistency and patience. Find out why **CIVITAS TURF DEFENSE** is the perfect solution for meeting these necessary cultural practices on the next page.

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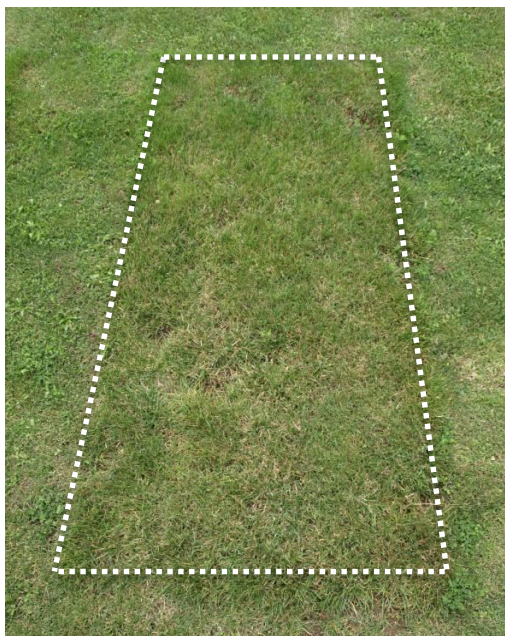
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CIVITAS WeedFree -- Efficacy — Aligned with customer expectations

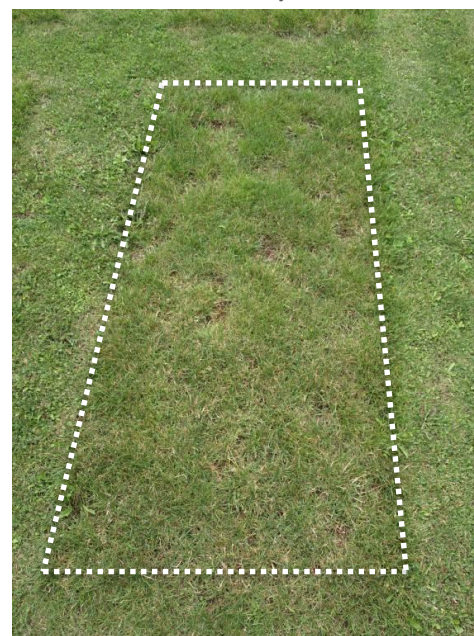
Untreated



CIVITAS WEEDfree BRAND Concentrate



Traditional 3-way mix



Same efficacy in controlling broadleaf weeds as Traditional 3-way Mix,
using less active ingredients - 6 weeks post treatment

- University of Guelph
- University of Illinois
- North Carolina State University
- University of Florida
- Pennsylvania Turf Grass Disease Institute

Cool Season Program

CORE SERVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Rate	Field Use EQ
Mow, Trim, Blow														
Litter Removal														
Hard Edging														
Weed Plant Beds													17 oz. / A x 2	11.8
Bed Edging														
Prune/Shear Shrubbery														
Pre-Emergent - Beds													150 lb./A x 2	113
Spring Clean-up														
Leaf/Fall Clean Up														
SELECT SERVICES														
Prune Trees														
Fertilize Trees														
Fertilize Shrubbery														
Turf Pre-Emergent													.75 lb. a.i. / A	8.8
Fertilize Turf														
Turf Post Emergent													3 pt./A x 2	56
Lime Application														
Turf Insect Control													70 lb. / A	12.8
IPM/ Insect Management													8 qts. / A	156.4
Core-Aeration														
Dethatch Turf														
Over-Seed														
Seasonal Color Install														
Total Field Use EQ													358.8	

Nitrogen and Phosphorus use may be restricted in some states, always check with local and county ordinances before applying.

Always read and follow the manufacturers label and directions when applying fertilizers and control products. The label is the LAW.

Intelligro Sustainable Program #1 - Cool Season

CORE SERVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Rate	Field Use Ex.
Mow, Trim, Blow														
Litter Removal														
Hard Edging														
Weed Plant Beds														
Bed Edging														
Prune/Shear Shrubbery														
Pre-Emergent - Beds														
Spring Clean-up														
Leaf/Fall Clean Up														
SELECT SERVICES														
Prune Trees														
Fertilize Trees														
Fertilize Shrubbery														
Turf Fertilizer														
Liquid Turf Fertilizer														
Turf Crabgrass														
Turf Broadleaf														
Turf Insect Control														
IPM/ Insect Management														
Turf Sedge Control														
Fungicide														
Core-Aeration														
Dethatch Turf														
Over-Seed														
Plant Growth Regulator														
Install Mulch														
Cultivate Mulch Beds														
Winter Service Visits														
Seasonal Color Install														
Irrigation Inspections														
Irrigation Spring Start Up														
Irrigation Winterization														
Fall Clean Up														
Total Field Use EQ													318.1	

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Intelligro Sustainable Program #2 - Cool Season

CORE SERVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Rate	Field Use EQ
Mow, Trim, Blow														
Litter Removal														
Hard Edging														
Weed Plant Beds														
Bed Edging														
Prune/Shear Shrubbery														
Pre-Emergent - Beds														
Spring Clean-up														
Leaf/Fall Clean Up														
SELECT SERVICES														
Prune Trees														
Fertilize Trees														
Fertilize Shrubbery														
Turf Fertilizer														
Liquid Turf Fertilizer														
Turf Crabgrass														
Turf Broadleaf														
Turf Insect Control														
IPM/ Insect Management														
Turf Sedge Control														
Fungicide														
Core-Aeration														
Dethatch Turf														
Over-Seed														
Plant Growth Regulator														
Install Mulch														
Cultivate Mulch Beds														
Winter Service Visits														
Seasonal Color Install														
Irrigation Inspections														
Irrigation Spring Start Up														
Irrigation Winterization														
Fall Clean Up														
													Total Field Use EQ	186.2

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OWN YOUR BUSINESS

OWN OUR VALUE PROPOSITION

OWN YOUR FUTURE

(Invest in it – differentiate)

OWN IPM