



2023 Analysis of the Herbicide Application report compiled by Phila Parks and Recreation

500,637.2 fl oz in 2023

3,911.23 liquid gallons/15.64 tons

***All tons calculated in US short tons**

Glyphosate based – 174,313.9 oz/5.45 tons in 2023

2.3 tons in 2022

7855.5 oz/0.25 tons in 2021

Aquaneat: active ingredient Glyphosate-isopropylammonium (53.8 %)

22511.5 oz/ .70 tons in 2023

Ranger Pro: active ingredient Glyphosate 41%

9340 oz/ .3 tons in 2023

Rodeo: active ingredient Glyphosate

the original glyphosate brand for nonselective control of troublesome aquatic plants.

102,016 oz / 3.18 tons in 2023

Roundup Custom: active ingredient Glyphosate 53.8% (basically the same as Rodeo and Quikpro)

aquatic and terrestrial: Absorbed by plant foliage, moving throughout the entire plant, to control more than 190 species of herbaceous weeds, brush, and vines

17382.42 oz/ .54 tons in 2023

Roundup QuikPro: active ingredient Glyphosate

Granular formula; Visible effects on most annual weeds occur within 1 day, and on most perennial weeds in 2 days.

23,064 oz / .72 tons in 2023

2,4-D -based: 2.73 tons in 2023

Alligare 2,4-D amine: This emulsifiable concentrate contains the active ingredient dimethylamine salt of 2,4, which completely controls weeds on most turf and lawn grass areas.

Analysis conducted by Toxic Free Philly; full herbicide reports available at

www.toxicfreephilly.org



2560 oz/ .08 short tons in 2023

Crossbow: active ingredients: 2,4-D and triclopyr*
control certain species of trees and brush and annual and perennial broadleaf weeds in non-crop applications.

84,843.33 oz/ 2.65 tons in 2023

Triclopyr*-based

Confront: active ingredients: Triclopyr; clopyralid

1.2 oz in 2023

Garlon 3a: active ingredient: Triclopyr

labeled for foliar applications as well as applications to emerged weeds and brush in standing water or on banks and shores of ponds or lakes found on rights-of-way or production forests.

688 oz in 2023

Garlon 4 Ultra: active ingredient: Triclopyr

basal cut-stump, basal bark and dormant-stem treatments, broad-spectrum control of woody plants

35763.76 oz / 1.1 tons in 2023

Triclopyr 4: 1229 oz in 2023

*Triclopyr is a systemic herbicide. It affects actively growing plants by mimicking a specific type of plant growth hormone, known as an auxin. Plants rapidly take in triclopyr through leaves and roots. It causes uncontrolled plant growth and plant death. After absorbing the herbicide, plants die slowly (within weeks).

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Other

Pendulum Aquacap: active ingredient: BASF pendimethalin
a water-based herbicide that controls grassy and broadleaf weeds before they emerge. It is effective on 21 common weeds and 25 troublesome weeds, and can be used on lawns, golf courses and ornamental plants. Its primary mode of action is to prevent plant cell division and elongation in susceptible species
134468 oz/ 4.2 tons in 2023

Sonora: (very similar to Stinger)
704 oz in 2023

Stinger: active ingredient: clopyralid[^]
a selective postemergence herbicide for control of broadleaf weeds, but particularly formulated to target thistle.
28928 oz/ .9 tons in 2023

[^]Clopyralid is an auxin-mimic type herbicide. It is more selective (kills a more limited range of plants) than some other auxin-mimic herbicides like picloram, triclopyr, or 2,4-D. Like other auxin-mimics, it has little effect on grasses and other monocots, but also does little harm to members of the mustard family (Brassicaceae) and several other groups of broad-leaved plants. Clopyralid's half-life in the environment averages one to two months and ranges up to one year.

Snapshot: (ie, SNAP) active ingredients: Isoxaben; trifluralin
disrupting weed seed development as seeds germinate; seedlings gradually die before breaking the soil surface. Snapshot bonds tightly with soil particles and is low in water solubility. Isoxaben disrupts an enzyme (found only in plants) necessary for protein synthesis.
Not registered in New York
1412 oz in 2023

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Altus is a novel non-neonic insecticide that can be used on a wide range of plants anytime during the production cycle for targeted control of whiteflies, aphids and other harmful insects. Altus contains *Flupyradifurone*, a butenolide chemistry that is a great fit for integrated pest management programs.
512 oz in 2023

BioCeres WP is an insect-pathogenic bioinsecticide using the *Beauveria bassiana* fungus. The OMRI Listed ANT-03 strain is approved for organic production and is perfectly suited in IPM programs, in a tank mix with other pesticides as well as specific, stand-alone use. BioCeres WP is used for the biological control of whiteflies, aphids, thrips, and plant bugs
512 oz in 2023

Captain XTR is formulated to increase the penetration of copper (INFUSION) into algae cells. This formulation feature is especially impactful when targeting tough to control mat forming, colonial and mucilaginous species. **Active Ingredients:** Copper Ethanolamine Complex 28.2%
12800 oz/ .4oz in 2023

CEASE can be used for organic production and targets common fungal diseases such as *Botrytis*, Powdery Mildew, Anthracnose, *Didymella bryoniae* (Gummy Stem Blight) and several leaf spot diseases such as *Alternaria* and *Entomosporium*. CEASE also controls bacterial diseases such as *Pseudomonas*, *Erwinia*, and *Xanthomonas* spp., as well as the soil diseases *Rhizoctonia*, *Pythium*, *Fusarium* and *Phytophthora*. CEASE is a contact biological fungicide containing a patented strain of the bacterium *Bacillus subtilis* which works in two ways. First, the bacterial spores occupy space on the plant surface and compete with the pathogens; then active compounds called lipopeptides produced by each bacterium disrupt the germination and growth of invading pathogens. Due to this action, resistance is not likely to develop.
1024 oz in 2023

Grandevo uses the bacterium *Chromobacterium subsugae* strain PRAA4-1T to provide long-lasting, broad spectrum control of sucking and chewing insects. Grandevo's mode of action is multi-faceted; it is toxic to insects and mites when ingested, reduces reproduction rates and repels pests after application. This [OMRI listed](#) and NOP compliant organic pesticide/miticide can be a valuable part of any IPM ([Integrated Pest Management](#)) program.
1280 oz in 2023

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Mainspring GNL insecticide guards greenhouse and nursery crops from key chewing and sucking pests, including thrips, whiteflies, aphids, caterpillars, leafminers, leaf-feeding beetles, soft scales and lacebugs. I

Active Ingredient(s): Cyantraniliprole

HRAC/FRAC/IRAC Classification: Group 28 Insecticide

1920 oz in 2023

Nu-Film P (adjuvant): essential for the performance of most conventional pesticides and are helping to shift use to more environmentally friendly treatment options such as biological pesticides and preventative options. It is classified as compliant for use on organic crops in the US and certain countries.

512 oz in 2023

Regalia® Biofungicide Concentrate is an extract from the plant *Reynoutria* spp. for use on ornamental plants, and edible crops. OMRI listed.

3582 oz in 2023

Scythe: Active ingredients: Pelargonic Acid 57.0% ; Related Fatty Acids 3.0%
a non-selective contact herbicide. The disruption of the cell membrane results in cell leakage and death of all contacted tissues.

768 oz in 2023

ZeroTol® 2.0: a combination of Hydrogen Peroxide and Peroxyacetic Acid to prevent, suppress and control a wide range of pathogens on plants and in the soil. It works equally well to treat and control bacteria, fungi and algae on hard surfaces and equipment. OMRI listed.

12800 oz in 2023

Top 5 what was treated:

2023: we now see PPR experimenting with OMRI listed products in a nursery setting; though huge amounts of glyphosate are continued to be sprayed on ballfields and natural areas.

- 1) Ecological restoration = 212,064.5 square feet sprayed, or 3.68 football fields
- 2) Fence lines/meadow, sidewalk, forest edge = 107,178 square feet sprayed, or 1.86 football (glyphosate and 2,4-D)
- 3) Ballfields/ ballfields fence lines = 103,433.44 square feet sprayed, or 1.79 football fields (all glyphosate)
- 4) Right of way, pavement, sidewalk, forest edge: 38,121 square feet sprayed

2022: most herbicide applied to pavement, WHILE most square footage sprayed was for forest restoration

- 1) Forest restoration, trails = 7,843,101.93 square feet sprayed, or 136 football fields (mostly Garlon and glyphosate)
- 2) “Meadow Foliar Herbicide” = 5,749,733.55 square feet sprayed, or almost 100 football fields (mostly Stinger)
- 3) Ballfields/ ballfields fence lines = 1,537,804 square feet sprayed, or 26.7 football fields (all RoundUP)
- 4) Building Parameters and fence lines = 620,083.67 square feet sprayed, or 10.7 football fields (all glyphosate)
- 5) Pavement, Sidewalks and right of ways = 580,510 square feet sprayed, or 10 football fields (6 tons of 2,4-D)

Honorable Mention: “High Volume Foliar Herbicide” in FDR park = 555,440.6 square feet sprayed/12.8 acres (or nearly 10 football fields)

2021

- 1) Forest restoration, forest edge, and trails = 3,354,363.6 square feet sprayed, or 58.2 football fields (glyphosate and garlon)
- 2) Pavement, sidewalks, and right of ways = 2,687,119.6 square feet sprayed, or 46.6 football fields (glyphosate and 2,4-D)
- 3) Ball fields = 1,209,225.6 square feet sprayed, or 21 football fields (all with glyphosate products)
- 4) Fence lines = 724,095 square feet sprayed (exclusively with glyphosate and 2,4-D)
- 5) Aquatic = 5693 square feet sprayed