Pennfine Perennial Ryegrass.

If it’s got a weakness, nobody’s found it.
But we have heard about some new strengths.

The Pennfine story gets better as it goes along.

Four years ago, the agronomists at Pennsylvania State University finished their work on Pennfine. And the professional turf community put this remarkable fine-leafed perennial ryegrass to work on golf courses, athletic fields, sod farms, parks, cemeteries and public grounds across the country.

In fact, Pennfine has performed even better in some areas than anticipated. It's proven to be more tolerant to both shade and heat. It's shown excellent rust resistance on the West Coast. And, although Pennfine showed good to excellent disease tolerance in university trials, its disease tolerance appears to be even stronger in actual use.

Now, after thousands of grounds maintenance pros have used Pennfine, nobody's reported a real weakness. All the characteristics the Penn State agronomists selected for—unsurpassed mowability, excellent disease resistance, exceptional decumbency, persistence under diverse management conditions, fine texture and compatibility with Kentucky Bluegrass—have proven out in the real world. That's the ultimate test.

The ultimate test.

Now, after thousands of grounds maintenance pros have used Pennfine, nobody's reported a real weakness. All the characteristics the Penn State agronomists selected for—unsurpassed mowability, excellent disease resistance, exceptional decumbency, persistence under diverse management conditions, fine texture and compatibility with Kentucky Bluegrass—have proven out in the real world. That's the ultimate test.

Dr. Joe Duich of Penn State inspecting a new application for Pennfine: Independence National Historical Park, Philadelphia.

Clean-cutting Pennfine Other fine-leafed ryegrasses

Pennfine production fields in the Pacific Northwest where a major effort is underway to meet growing demand for seed.

Increased production.

From the very beginning, there's been only one problem with Pennfine: not enough seed to meet demand. And that problem is just about solved with substantially increased production. We can't make you a flat promise. But, if you order fairly soon, you should be able to get Pennfine seed in the quantity you want.

On the other hand, maybe you're still not convinced. In that case, we'll send you a test kit with enough Pennfine seed for you to develop a 100 sq. ft. test plot. And you can try to find a weakness on your own turf.

Either way, whether you seed Pennfine this year or just test it, we think you'll be impressed by the results.

☐ Let me know how I can order Pennfine Perennial Ryegrass.
☐ I'm still not convinced. Send me a Pennfine Test Kit.

Name ____________________________________________
Title ______________________________________________
Club or Company ____________________________________
Address __________________________________________
City __________________________ State __________ Zip __

Please Note: The test kit offer is restricted to turf professionals, people whose livelihood depends on the establishment and maintenance of quality turf.

Mail to: Pennfine Perennial Ryegrass, P.O. Box 923, Minneapolis, Mn 55440.

Circle 130 on free information card
A perfect pair: The versatile STIHL 08S big power chain saw and the handy new, lightweight STIHL FS-08 Brush Cutter. The same high performance engine powers them both. The FS-08 Brush Cutter does a real professional job in tough weeds, stubborn shrubs and small trees when using either the blade with rotating knives or circular saw. This brush cutter features STIHL's famous AV anti-vibration system that absorbs fatiguing engine vibrations. Lets you cut longer and easier with less effort.

Ask your rental friends or your nearest dealer about STIHL'S better performance, lower maintenance & down-time and proven earning capacity.

STIHL Incorporated
5898 Thurston Avenue, Virginia Beach, Virginia 23455
14 Tree Spade vs. Bare Root Planting — The City of Lansing, Michigan evaluated the cost and survival rate of their street tree planting program. The study is very thorough. And the conclusions are most convincing.

20 AERIAL APPLICATION — Three Virginia Polytechnic scientists examine the systems, techniques and equipment of helicopter contract application on right-of-ways. They start with the basics and work their way into the philosophy of aerial spraying.

26 “Instant Lawns for Home and Industry” — The Huber Sod Ranch motto is one all sod growers can admire. Huber is the featured grower in our Commercial Sod Industry Section. He runs a clean, efficient, and profitable operation.

38 High Flying Contract Application — Jerry Hill of Eastern Helicopter Service flies the electrical transmission and distribution right-of-ways. He is a contract applicator treating the brush and woody growth beneath the lines.

THE COVER — Jerry Hill flies his ship down a distribution line applying chemical to the vegetation. His ship sports a Microfoil boom and .060 nozzle arrangement manufactured by Amchem.
Weeds and roots under asphalt paving can cause tremendous damage. But you won't know they're doing it until it's already done. That's why you need CASORON, the Undercover Weed Killer.

CASORON is approved for use under asphalt, whether it's a recreational court, a golf path, or a parking lot. Applied over the subgrade, CASORON soon begins to emit a weed-killing vapor. This gas is trapped under the asphalt, forming a long-lasting protective blanket against weed breakthrough. Straying roots from ornamental plants bordering asphalt surfaces can't damage the surface because CASORON is a "root-inhibitor." The tips of the ornamental roots stop growing when they come in contact with the CASORON-treated soil, and no harm is done to the ornamental.

CASORON is also perfect for weed control around all kinds of ornamentals and trees. Use it in parks, beside buildings, along highways, in cemeteries, or almost anywhere to eliminate the need for costly, time-consuming close trimming and mixing. It effectively kills more than 65 perennial and annual weeds without harming ornamentals or sterilizing an area for future planting.

NOW...TRY IT FREE

If you've never used CASORON, we'd like to give you a first-hand look at how it works. Send us your name and title on your business letterhead. We'll send you a FREE 5-pound package of CASORON and applicator, along with more detailed information. Whether you use it under asphalt or in your regular weed control program, you'll find that CASORON really works.
That's it! Par Ex fertilizer mixes with IBDU* release nitrogen nice and slow and easy. They give your grass a full, but gradual, feeding of nitrogen up to 12 weeks—minimum, IBDU—exclusive with Par Ex turf fertilizers—is a primary source of water insoluble nitrogen (W.I.N.). Activated by soil moisture, not temperature, IBDU's release rate is constant, slow, just right for grass.

Straight 31-0-0 Par Ex IBDU gives you a really slow release of N, plus benefits you don't get from ordinary slow release nitrogens; namely, total availability in a single growing season, earlier green-up in spring and longer lasting green in fall.

Par Ex fertilizer mixes with IBDU are uniformly made to give you the correct balance of water soluble nitrogen, water insoluble nitrogen, phosphorus and potassium for your specific turfgrass needs.

So order Par Ex Professional Products. The only brand that offers IBDU ... mixed or straight.

LOCAL PAR EX DISTRIBUTORS

Capitol Nursery Sup., Inc.
Phoenix, Ariz. 85005
(602/272-5508)
Swift Agri. Chem. Corp.
Los Angeles, Cal. 90023
(213/624-5600)
Foster-Gardner, Inc.
Santa Ana, Cal. 92706
(714/542-6741)
Foster-Gardner, Inc.
Coachella, Cal. 92236
(714/398-6151)
Agri-Turf Supplies
Santa Barbara, Cal. 93101
(805/963-3691)
Northern Cal. Fert. Co.
San Jose, Cal.
(408/392-7957)
Abate-A-Weed
Bakersfield, Cal. 93308
(805/598-5616)
Robinson Fertilizer Co.
Orange, Cal. 92866
(714/538-3575)
Wilbur-Ellis Company
Chula Vista, Cal. 92012
(714/422-5321)
Agri-Chem, Inc.
Brush, Col. 80723
(303/642-5511)
Avon Cider Mill
Avon, Conn. 06001
(203/677-0343)
Swift Agri. Chem. Corp.
Winter Haven, Fla.
(813/293-3147)
Turf Products, Ltd.
Wheaton, Ill. 60187
(312/688-5537)
Turf Mgmt. Supplies
Rockton, Ill. 61072
(815/624-7578)
Paarhammer Chemical
South Holland, Ill. 62467
(312/474-3086)
Lawn and Turf, Inc.
Covina, Cal. 91722
(304/483-4743)
Swift Agri. Chem. Corp.
East St. Louis, Ill. 62201
(618/277-5630)
Turf Products, Ltd.
Auburn, Me. 04210
(207/773-7181)
Texas Fertilizer
Galveston, Tex. 77551
(409/763-7561)
L & E Chemical, Inc.
Royal Oak, Mich. 48067
(313/398-3536)
J. J. Dill Company
Kalamazoo, Mich. 49005
(616/349-7755)
just add water.
Now you can begin to manage the whole spectrum of broadleaf pests in a total-control program starting this fall.

We concede that nothing is perfect.

But we do say that TRIMEC comes closer to the turfman's dream of weedkill perfection than any other herbicide.

Before we examine the reasons why — all four of them — we want to discuss the exclusive, patented TRIMEC formulation and synergistic action. For therein lies the key.

TRIMEC's active ingredients — 2,4-D, MCPP and dicamba — are no secret. Each is a chemical widely used and thoroughly proved in broadleaf control.

Each chemical has its unique qualities and different effects in weedkill. But each also is limited so that none of the three chemicals, alone, can deliver the all-round versatility essential to a total, professional turf program. The reach of each chemical is too limited.

Through research and testing, these three chemicals finally were combined in a way that enhances the best of each for broadleaf control. Significantly, it was also discovered that the 3-way formulation assumed a fourth dimension of power — a synergistic strength that has far more than mere additive effect. Mathematically, 1+1+1+1 costs less.

TRIMEC herbicides are synergistic. Thus, surprisingly light applications to turf pack a deadly wallop to broadleaf enemies.

Now, these three proven chemicals have been carefully reacted and balanced together, in-separably, to form a new and far superior herbicide . . . 'TRIMEC.'
is Four ways better: safely controls all weeds, works even in cool weather.

The name is TRIMEC.
Read on to learn why TRIMEC is the best broadleaf herbicide you can buy:

1) **TRIMEC is positively effective.**
No other herbicide is so totally reliable in destroying the wide spectrum of broadleaf weeds.
The fact is, we have yet to discover a broadleaf weed that can resist TRIMEC'S lethal punch.
Normally, this escape-proof herbicide completely kills actively growing weeds with one application, correctly timed and applied. The result is positive and definite — turf thrives in weed-free abundance.

2) **TRIMEC is safe**
It's the safest herbicide available for grasses, because of the small amounts of both 2,4-D and dicamba. And because the recommended dosages are so light, there is no significant root uptake. Consequently, TRIMEC does not harm flowers, trees and shrubs.
Thus while TRIMEC is deadly to weeds, it is gentle and harmless with grasses, flowers, trees and shrubs, when properly applied.
More, TRIMEC is friendly to the environment. The small dosages required put less chemical into the soil. And, because all components are biodegradable, they are soon rendered harmless by natural soil organisms.

3) **TRIMEC herbicides cost less**
Although the cost-per-gallon may be as much or more than other herbicides, the actual cost-per-acre of weed control is substantially less. Smaller amounts of chemicals just naturally reduce the cost. Additional economy results from its effectiveness, which almost always eliminates the need for repeated applications, which saves labor and equipment costs.
TRIMEC's effective cost is the lowest of all broadleaf herbicides.

4) **Cool-weather wallop**
TRIMEC herbicides work well in late autumn or early winter, when temperatures are in the fifties. This gives you a tremendous advantage.
At last, you can destroy promptly those late-starting dandelions, plantains, chickweeds, etc. that sprout after your summer spraying.
Going into winter with a clean turf has a great spring benefit — you needn't spray so early for dandelions that you miss most of the later-starting weed crop.
No longer are weeds in control. Now you're in command, planning your work and working your plan to nip weeds at the correct time, in any season.

**Special for sensitive grasses**
TRIMEC is available in a special Bentgrass formula made especially for Bentgrass, and other grasses sensitive to higher rates of 2,4-D.

---

**Why fall is the best time to "TRIMEC" dandelions**

TRIMEC's cool-weather wallop lets you destroy them with one treatment in late autumn or early winter, when temperatures have cooled to the 50s range.
This gets the latecomers — any weeds that sprout after your summer spraying. The advantages are obvious.
By going into winter with a weed-free turf, you can spray later next spring, when the late-starting weeds are coming on. You won't have to spray early just to knock out the blooming dandelions!
This is your first step toward total control with TRIMEC — the best herbicide available.
Fitz Putts Penncross

PAT FITZSIMONS
Touring Pro and winner of the 1975
Glen Campbell L.A. Open Golf Tournament

PENNCROSS CREEPING BENTGRASS

Today's most popular variety of creeping bentgrass is found on golf courses around the world. Penncross can take the heat in warm climates and stays green longer in the fall up north. Penncross is more genetically uniform, resists disease better and establishes quicker than conventional bents. What does this mean to Pat Fitzsimons? "Consistent greens are important to me and Penncross greens have the uniformity that gives me greater confidence in putting."

"The Grass Designed For Golfers"

Write for free pamphlet on planting and maintaining Penncross greens.
CIRCLE FOR FREE INFORMATION

CIRCLE the numbers which correspond to advertising, or new product listings in this issue. Then complete the form at right and mail. Inquiries serviced for 90 days from date of issue.

<table>
<thead>
<tr>
<th>NAME ____________________________</th>
<th>TITLE ____________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPANY __________________________</td>
<td>ADDRESS __________________________</td>
</tr>
<tr>
<td>CITY __________ STATE ____________ ZIP ______</td>
<td></td>
</tr>
</tbody>
</table>

CONTINUE TO RECEIVE
WEEDS TREES & TURF

Are you interested in receiving or continuing to receive WEEDS TREES & TURF? □ YES □ NO. If yes, complete all information on this card and mail.

(Signature)

Date ____________________________

CHECK ONE THAT APPLIES MOST

| (1) □ Sod Growers | (7) □ Rights-of-Way Maintenance, Railroad |
| (2) □ Tree Service Companies | (8) □ Golf Course Superintendents, Railroad |
| (3) □ City Managers | (9) □ City Purchasing Agents |
| (4) □ Contract Applicators (Ground and helicopter) | (10) □ Parks & Grounds Superintendents, (federal, state, municipal) |
| (6) □ Rights-of-Way Maintenance, Utility | (12) □ Turf Specialists (Includes Seed Growers) |
| (13) □ Armed Forces Installations | (14) □ Airlines |
| (15) □ Hospitals, Schools, Colleges, Race Tracks, Shopping Centers | (16) □ Cemeteries |
| (17) □ Athletic Fields | (18) □ Industrial Parks (Factory Lawns) |
| (19) □ Golf Course Greens Chairman, Owners, Managers and other Supervisory personnel |
| (20) □ Consultants | (21) □ Industrial Research |
| (22) □ Institutional Research and Teaching | (23) □ Formulators of Herbicides, Insecticides, and Related Compounds for Vegetation Maintenance and Control |
| (24) □ Retailers or Wholesalers of Chemicals Used in Vegetation Maintenance | (25) □ Libraries |
| (26) □ Regulatory Agencies, Associations | (27) □ Airports |
| (28) □ Hotels | (29) □ Restaurants |
| (30) □ Insurance Companies | (31) □ Real Estate Firms |
| (32) □ Construction Companies | (33) □ Advertising Agencies |
| (34) □ Advertising and Media Agencies | (35) □ Newspapers & Magazines |
| (36) □ Book Publishers | (37) □ Other |
| (38) □ Government Agencies | (39) □ Educational Institutions |
| (40) □ Non-Profit Organizations | (41) □ Religious Organizations |
| (42) □ Other Organizations | (43) □ Individuals |

11/75