

"Bunton lawn-turf equipment is built to take a beatin'... it's tough! Like this self-propelled riding mower. Equipped with a cushiony seat and power steering, it can turn on a dime! It can even go over a pile of rocks and still come out cuttin'!" So listen to Rocky Graziano...send for more information today...with Bunton, you can't lose! Available from 8-inch to 52-inch cut.



BUNTON CO. 4303 Poplar Level Road, Louisville, Kentucky 40213, U.S.A. Phone 502/459-3810 Telex 204-340

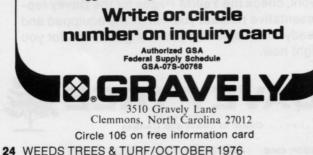
Circle 124 on free information card

FREE catalog of grounds care equipment



Full-color catalog shows the full line of Gravely lawn and garden tractors with accessories for mowing, grounds maintenance, gardening, snow removal, and more. Unique tractors feature all-gear transmission that

Popular Science called "probably the world's most rugged small gear-type tractor drive."



CULTIVAR GLOSSARY

KENTUCKY BLUEGRASSES*

ADELPHI-Rutgers hybrid from an unreduced egg of Bellevue polinated by Belturf, 80 chromosomes; chief proprietor is Adikes, Jamaica, N.Y.

Dark, low, with a lengthy season and good spring color; responds to fertilization; good disease tolerance (some leafspot Midwest, resists snowmold, rust, Fusarium and stripe smut); medium texture with foliage rather upright; about 15 percent sexual; wide adaptability; relatively few seedheads.

ARBORETUM—mass selection from hot dry hillside at Gray Summit, Mo.; chief proprietor is Mangelsdorf, St. Louis, Mo.

Indistinguishable from "old-fashioned" Kentucky bluegrass, but unusually persistent and surviving under low maintenance. Best used for unpampered, tallmowed swards; in spite of leafspot and intermittent setback, hangs on year after year.

ARISTA—selection from Van Engelen, Holland; chief proprietor is International Seeds, Halsey, Or.

A "better-than-average" fast-starting strain useful for sportsfields and for extending mixtures; superior to other "common" types, but generally below top cultivars; disease vulnerability, but good recovery.

BARON-clonal, pure-line from Barenbrug, Holland; chief proprietor is Loft, Bound Brook, N.J.

An all-around "workhorse" cultivar lacking striking features; high ratings for vigor, reasonable disease resistant (some Fusarium susceptibility); decumbent, stocky growth (withstands low and less frequent mowing.); with average spring color and many seedheads; economical and a good cultivar for sod; consistently above average in almost all locations; similarities with Cheri and Victa.

BIRKA—European selection; chief proprietor is E. F. Burlingham, Forest Grove, Or.

Good disease resistance, especially leafspot; slow to green in spring, and winter color not the best; little information yet released, but has rated well, including with minimum care in Connecticut.

BONNIEBLUE—Rutgers hybrid from an unreduced egg of Bellevue pollinated by Pennstar, 94 chromosomes; chief proprietor is E. F. Burlingham, Forest Grove, Or.

Dark, lengthy-season, decumbent; highly apomictic; excellent disease resistance, especially for leafspot, stripe smut and rust (though suffers some from Fusarium); withstands low-mowing; may show some hot weather stress, but outstanding in cooler weather.

BRUNSWICK—one of Rutgers selections; chief proprietor Turfseed, Hubbard, Or.

Little test information yet available.

ENMUNDI-Van Engelen, Holland, selection; chief Continued on page 27

U.S. proprietor is International Seeds, Halsey, Or.

Excellent general properties, dense and carpet-like but not winter quality of many domestic selections; limited "test" reports.

FYLKING—from Svalof, Sweden, about 80 chromosomes; U.S.A. chief proprietor Jacklin Seed, Spokane, Wa. (0217 strain).

Very attractive, luxuriant beauty; semi-decumbent and adapted to low mowing; highly apomictic; initially quite tolerant to disease, but mildly susceptible to leafspot, etc. recent years; gene linkages similar to Pennstar, with low seedhead formation and response to moderate fertilization; not aggressive; widely available as seed of excellent quality.

GALAXY—hybrid from Rutgers, Bellevue the seed parent, Pennstar the pollen plant, approximately 91 chromosomes; chief proprietor is Whitney-Dickinson, Buffalo, N.Y.

Excellent cool-weather performance and extended season; dark, low, highly apomictic, and well regarded for turf quality; medium texture; some susceptibility to stripe smut, but generally resistant to leafspot, Fusarium, mildew and rust: suggested in blends where smut is a problem.

GEORGETOWN—Rutgers selection; chief proprietor is Loft, Bound Brook, N.J.

Little reported information available yet, but initial trials are encouraging.

GLADE—selection, from a New York lawn; chief proprietor is Jacklin, Spokane, Wa.

Low, dark, resistant to mildew (a chief cause of loss in shade); recommended as a slow-growing, low-profile cultivar for shade or sun; highly true-to-type and very attractive; stands low mowing (tees); some characteristics of high-rating Birka, but better color; mild leafspot and Fusarium susceptibility, but quite resistant to rust and stripe smut.

MAJESTIC—another Rutgers hybrid of Bellevue pollinated by Belturf; chief proprietor is Loft, Bound Brook, N.J.

Beautifully low and dense, one of the most decumbent cultivars; makes a strong sod, with lengthy season; reasonably tolerant of all diseases; "tops" in Long Island tests; stands out in cool weather, particularly for dark color and low profile (excellent winter appearance); somewhat slowgrowing, and takes time to mature.

MERION—highly apomictic selection discovered near Philadelphia; sponsor is Merion Bluegrass Association, Hubbard, Or.

Long the "standard of excellence" for bluegrass cultivars — low, dense, of medium texture, and very attractive; excellent leafspot resistance, but suffering today from "new" diseases such as stripe smut and Fusarium as well as rust and mildew; still "tops" where diseases are not a serious problem; needs generous fertilization; better in more northerly regions than southerly ones; fairly slow to establish but strongly competitive and with good wear-resistance; tolerates low mowing.

Continued

BILLY GOAT HAS SOME GOOD NEWS



AND SOME BAD NEWS

90% of your clean up costs are labor costs.

The good news — Billy Goat models BG (Plant) and BT (Turf), turn hours into minutes — turn clean up time into production time.

One man and a Billy Goat just ask our customers. "Handles every task - rugged no problems", says one. "Cleans completely - saves time", says another. Billy Goat suction sweepers get the job done quickly, thoroughly and saves labor time. Call or write Billy Goat for more good news. You'll like the way they eat 'n run. TURF NDUSTRIAL VACUUMS INDUSTRIES.INC P.O. Box 308 • 1803 South Jefferson Lee's Summit, Missouri 64063 • (816) 524-9666

Circle 114 on free information card

OCTOBER 1976/WEEDS TREES & TURF 27

Continued

NUGGET — selection, discovered near Cook Inlet, Alaska; chief proprietor is Pickseed West, Tangent, Or.

A "breakthrough" for dark color, low, dense growth, and general attractiveness; some buildup of diseases (dollarspot, red thread and Fusarium principally), but good leafspot resistance and at least fair tolerance of mildew, rust and smut; "rave" ratings where free from disease; better northward than southward; does well in shade; slow vertical growth; excellent sod strength, rhizome and leaf production, but

Horticultural Perlite... The multi-purpose soil conditioner for turf, containers and propagation.

Professional landscapers and grounds maintenance men have long made Horticultural Perlite one of their main 'tricks of the trade'. It's an ideal soil conditioner that

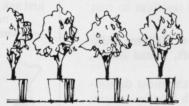


helps promote "a sea of green velvet". You see, by preventing compaction, it keeps the soil loose enabling more oxygen to reach and help nourish the root system. And because Horticultural Perlite also retains three to four times its weight in moisture, it keeps the root network moist long after watering. The result is a beautiful blanket of green growing on a thick healthy, robust rootsystem that not only keeps grass beautiful, but prevents **golf courses, institutional and campus**

lawns and residential lawns from getting soggy, mushy or soft underfoot.

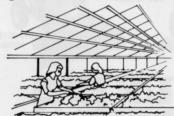
Nurserymen find Horticultural Perlite practically indispensible for **container grown plants and shrubs** because of its ability to retain moisture, and to keep the mixture

around the root environment loose. It is also a great "starting mixture" for transplanted stock as it helps reduce the incidences of transplant shock. And because Horticultural Perlite is sterile and non-toxic, it won't rot, decompose, disintegrate or break down. Nor will it help promote insect life. Being light in weight, Horticultural Perlite makes container moving light work and shipping costs a lighter expense. It's not only



ideal for your plants - Horticultural Perlite is ideal for your business.

For plant propagation, Horticultural Perlite soil mix is almost as important as sunlight. Because of its water-retention characteristics, this mixture maintains an even



distribution of moisture to stimulate fast root development in cuttings and to speed seed germination. Most important, by keeping the starting mixture loose, Horticultural Perlite permits a freer flow of oxygen to help nurture the new growth. This also makes transplanting easy; without root damage; and without undo shock. Horticultural Perlite is inert matter that can last indefinitely in your seed beds. It is sterile, odorfree and can't promote insects or bugs. It is a

great asset for the new beginnings of plant life.

45 West 45th Street • New York, N. Y. 10036 • (212) 265-2145 Circle 110 on free information card somewhat slow to establish.

PENNSTAR—Pure line highly refined at Penn State Univ. from European seed stock; chief proprietor is Seed Production Improvement Corp., Minneapolis, Minn.

Exceptional grace and beauty; resistant to serious disease attack, though suffering some from Fusarium; thatches little, strongly apomictic; requires only moderate fertilization; linkage of characteristics similar to Fylking; withstands low-mowing; produces few seedheads.

PLUSH—clonal selection from under a pinoak in New Jersey; chief proprietor is FFR Cooperative, West Lafayette, Ind.

Competitive and widely adapted; medium green color, reasonable disease resistance (some susceptibility to Fusarium), and low habit; exceptionally broad leaf blade provides a bold texture; early spring green-up; seems to perform well in southern parts of bluegrass belt, and rates with elite varieties under continental conditions.

PRATO — selection, from Holland; chief proprietor is Northrup-King, & Co., Minneapolis, Minn.

An above-average choice especially used for extending blends and mixtures; of good color, reasonably low, dense and drought-resistant; fine texture, few seedheads; seems resistant to dollar-spot, mildew, rust and stripe smut.

RAM I—Rutgers selection; U.S.A. proprietor is Loft, Bound Brook, N.J.

Little information, but generally good performance in reported tests.

SODCO — composite of four "pure lines" selected at Purdue Univ.; chief proprietor is Purdue Agri. Alumni Seed Improv. Ass'n., W. Lafayette, Ind.

A tailored variety noted for low, slow growth, dark color, shade tolerance, good resistance to all diseases; of medium texture; few seedheads, and not prone to thatch; should be well fertilized for top performance; adapted to shade; slow establishing (thus needing less mowing), but takes half again as long to make mature sod as faster cultivars; widely adapted.

SYDSPORT — selection, from Sweden; chief proprietor is E. F. Burlingham, Forest Grove, Or.

Bold (broad-bladed), vigorous and aggressive, suggested for "hard use" areas; resists leafspot, but suffers some from rust and dollarspot, and may develop thatch; well thought-of where an "ebullient" selection is appropriate.

TOUCHDOWN — Rutgers and USGA release, clone discovered by Supt. Rewinski on Long Island fairway; chief proprietor is Pickseed West, Tangent, Or.

Bright-green, medium-low, finetextured cultivar with rather upright foliage; stands low mowing (tees); long growing season; disease-resistant (except mildly affected by Fusarium); highly apomictic; requires only moderate fertilization, yet establishes rapidly.

FINE FESCUES**

ATLANTA—selection; chief proprietor Northrup King & Co., Minneapolis, Minn.

Little information; promising having rated highly in limited testing.

BANNER—Rutgers 45-clone synthetic from East Coast Sources; proprietor is E. F. Burlingham, Forest Grove, Or.

Chewings type: fine texture, dark color, moderately low-growing; strong sod; widely adapted, perhaps into the Southeast; tolerates low pH and low fertility.

FORTRESS—Rutgers 6-clone synthetic assembled from old turf areas East Coast; proprietor is Turfseed, Hubbard, Or.

A spreading fescue, bred especially with roadside use in mind; spreads aggressively but thatches little; mid-summer leafspot, but recovers well; usual fescue tolerance of low fertility, low pH and shade; utilitarian rather than consistently beautiful.

HIGHLIGHT — selection? from Holland; chief proprietor, International Seeds, Halsey, Or.

A "show-off" (especially bright and beautiful) of the Chewings type; establishes rapidly, and has excellent color; can be mowed low for over-seeding golf greens. JAMESTOWN — selection from abandoned seaside planting in Rhode Island; chief proprietor, Loft, Bound Brook, N.J.

A Chewings-type fescue with exceptionally low growth and dark color; durable and recuperative; enjoys high ratings generally; some-

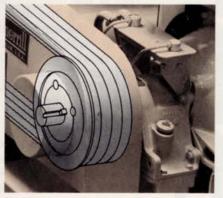


Applying engineering designs which "Sound Conditioned"* our industrial scrap reduction machinery, Mitts & Merrill can modify our brush chippers for low noise levels. At the same time, those engineering features which have made Mitts & Merrill the leader for years have been retained.

*Copyright Mitts & Merrill, Inc., 1973, 1974, 1975. All rights reserved.

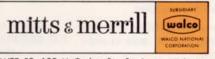


Staggered knife pattern, for years a Mitts & Merrill feature, has always resulted in a lower noise level. First, by segmenting the noise source. Second, through smoother cutting action. Third, by producing smaller chips.



Optional torque converters and the heaviest steel cylinder — even without an external flywheel — combine to give positive cutting action under the most rugged conditions. Isolates the engine from shock. Minimizes maintenance.

Plus • Positive safety-lock pin for greater operator safety • Swing-away, folding feed chute protects cutting chamber; allows instant access and increases maneuverability • Heavy duty construction includes coil spring, torsion-type suspension, and box tubular steel frame.



Dept. WTT 52, 109 McCoskry St., Saginaw, Michigan 48601 Circle 109 on free information card

OCTOBER 1976/WEEDS TREES & TURF 29

Continued

what susceptible to leafspot, but good recovery and strong summer performance; excellent for golf green overseeding.

KOKET - synthetic from 5-clonal lines selected in Holland; chief proprietor, E. F. Burlingham, Forest Grove, Or.

A strong Chewings cultivar with excellent tillering capacity; consistently among the top-rating cultivars; good density and weed resistance; not quite so brilliant as Highlight, but perhaps steadier, with good disease resistance.

PENNLAWN - tripartite, syn-



Т

This is the machine that revolutionized the turf industry . . . the machine that seeds or sprigs, fertilizes, waters, sprays, and mulches in one easy operation . . . the BOWIE HYDRO-MUL-CHER.

Its performance and reliability are unequaled. Its capabilities have created a whole new industry of lawn and turf, ground cover and erosion specialists. The BO-WIE HYDRO-MULCHER is the daddy of them all . . . the green machine!

EXCLUSIVE BOWIE HYDRO-MULCHER FEATURES:

- Only proven unit for both sprigging and seeding with cellulose fiber mulches.
- Can mulch, fertilize and seed minutes.

- Has enclosed shredder bar for shredding full bales of cellulose fibers.
- Has centralized tower control with no hoses.
- Has triple agitators for faster mixing and eliminating sediment build-up.
- Uses pump only for spraying, so pump lasts longer.
- Has spray mist and other accessory nozzles for such uses as insect control, tree spraying and fire fighting.
- Six models from 350 to 3,000 gallon capacity.

CALL OR WRITE FOR COMPLETE DETAILS:



BOWIE INDUSTRIES, INC. or sprig half an acre in eight P.O. BOX 931, BOWIE, TEXAS 76230 (817) 872-2286

thetic from Pennsylvania State Univ.; public variety.

Familiar "improved variety" standard for comparison, exhibiting general "average" performance.

RUBY - selection, from Holland; proprietor, Northrup, King & Co., Minneapolis, Minn.

An open-growing fescue of the spreading type, especially useful in mixtures, and for low maintenance areas; tends to remain vegetative, with limited seedhead formation; good spreader and establishes rapidly; intermediate in turf qualities,

PERENNIAL ryegrasses***

CITATION - Rutgers 3-clone synthetic; proprietor is TurfSeed Inc., Hubbard, Or.

Fine-texture, dark color and semi-decumbent growth habit characteristic of the new "turf-type" perennial ryegrasses; mows neatly; good summer performance.

COMPAS - mass selection, from Holland; chief proprietor, International Seeds, Inc., Halsey, Or.

More "turf-type" qualities (reasonably low growth and density) than common ryegrass, fairly finetextured; wear resistant; establishes rapidly; one of the earlier introductions of intermediate nature.

DERBY - 12-clone synthetic assembled in Indiana; chief proprietor, International Seeds, Halsey, Or.

All-purpose cultivar ranking with Manhattan and Pennfine in quality; dense, mows cleanly, tolerates low mowing; good disease tolerance; wear-resistant and reasonably tolerant of cold; not so fine-textured as is Pennfine.

DIPLOMAT - A Rutgers synthetic; proprietor is Loft, Bound Brook, N.J.

An excellent turf-type cultivar a peer of Citation, Derby, Manhattan, etc., but not yet widely reported upon.

GAME - clones screened in Holland; U.S.A. proprietor is Willamette Seed, Shedd, Or.

A widely promoted, utilitarian

Circle 134 on free information card

Continued

cultivar economical for massive use such as athletic fields; reported to be broadly adapted hard-wearing and quite winter-hardy; well-suited for temporary cover; resistant to rust.

MANHATTAN - 16-clone multiline chiefly from Central Park, New York sources; chief proprietor is Whitney-Dickinson, Buffalo, N.Y.

An outstanding "turf-type" perennial ryegrass, low, dark, mows well, is uniform, and has good winter hardiness: the pace-setter in trend towards improved ryegrass cultivars; a little slower sprouting than some selections, but excellent for overseeding golf greens; may sometimes suffer rust, leafspot and light brownpatch, but generally rates highly for continental as well as coastal climates.

NK-100 - cross of famed S-23 (Europe) with Oregon perennial, mass selection; chief proprietor,

Northrup, King & Co., Minneapolis, Minn.

Persistent, leafy, rust-resistant, reasonably heat-and-droughttolerant; rates highly on the eastern seaboard but weaker in continental climates and for southern overseeding; somewhat susceptible to Fusarium and Helminthosporium; mows less neatly than more recent releases, and not so winter hardy as NK-200.

NK-200 - selection from Minn.; chief proprietor, Northrup, King & Co., Minneapolis, Minn.

An unusually hardy cultivar (to -34° in Minnesota), finer-textured than NK-100; establishes rapidly, mows rather neatly, and resists most diseases (although somewhat susceptible to brownpatch); deep rooting, good for recreational areas where durability is needed; does well under modest maintenance; more apt to suffer from summer than winter stress.

PELO - synthetic, from Holland; chief proprietor, Northrup, King & Co., Minneapolis, Minn.

Reasonably fine-textured, dense: more durable, winter-hardy and neater mowing than common perennial, with a deeper color; fairly resistant to rust and snowmold (but somewhat attacked by brownpatch, Fusarium and Helminthosporium): an early improved cultivar generally not rating so highly as recent domestic releases; provides good quality in mixtures and for winterseeding in the South.

PENNFINE — 3-clone synthetic from Pennsylvania State Univ.; proprietor is Seed Production Improvement Corp., Assoc., Minneapolis, Minn.

One of the "star performers,"

Contact your local distributor or

Circle 135 on free information card



STRAIGHT TALK FROM YOUR DITCH WITCH MAN

rating at or near the top in density, uniformity, color, disease resistance and general desirability; a good putting surface for overseeding southern golf greens, with a gradual transition; unusually fine-textured, and mows neatly; little disease.

YORKTOWN — Rutgers synthetic multi-clone polycross; proprietor is Loft, Bound Brook, N.Y.

Dense, fine-textured, darkgreen, with an attractive sheen; excellent seedling vigor, and moderate growth rate; too new to have been tested widely, but apparently adapted wherever perennial ryegrass is used; good disease resistance, but some brownpatch; many of the characteristics of Manhattan.

*KENTUCKY BLUEGRASSES

Bluegrass is the outstanding lawngrass for the North, sometimes a bit slow to make cover but once established highly recuperative and easily cared for (spreading by rhizomes, mowing neatly), excellent for all except very poor situations.

**FINE FESCUES — Fescues are mostly used in bluegrass mixtures, or planted in dry, poor soil, shaded locations. They are very attractive during cooler portions of the year, beautiful in texture and color, but often suffer summer stress. Fescues do not spread by rhizomes so abundantly as do bluegrasses, nor mow so cleanly.

***PERENNIAL RYEGRASSES -

The improved ryegrasses are now as attractively fine-textured as is bluegrass. Seed sprouts quickly, and seedlings are vigorous. Bluegrass is generally included with ryegrass for permanence, better spreading, and neater mowing, although many athletic fields are kept in top shape by overseeding with perennial ryegrass. Best adapted to equable climates neither overly cold nor warm seasonally. Require about the same care as bluegrasses, but are faster growing and may need some extra mowing.



"Let's talk about the reasons the Modularmatic concept can save you a lot of money!"

"A Ditch Witch Modularmatic can do more different underground jobs than any other machine!

One vehicle using interchangeable work modules — that's what our Modularmatic concept is all about. An example of what this can mean to you: Let's say you have a big trenching job now — buy the right Modularmatic vehicle with a trenching module. When that job is finished, a vibratory plow contract comes up. Your major investment — the Modularmatic vehicle — is already bought and paid for. All you need is a vibratory plow module and you're ready to go. Modularmatics get the job done, give you greater job flexibility and help spread equipment costs.

We'd like the chance to tell you more. We'd like to give you a free demonstration to show you what a Modularmatic can do. Remember, at Ditch Witch, we tell it to you straight!"

Call (800) 654-6481 Toll Free for the name of the dealer nearest you.



This Ditch Witch Modularmatic is equipped with the Combo module for both trenching and vibratory plowing; a backhoe module is mounted on the front

Ditch Witch ... equipment from 7- to 195-HP.

CHARLES MACHINE WORKS, INC. P.O. Box 66 Perry, Oklahoma 73077



Circle 104 on free information card OCTOBER 1976/WEEDS TREES & TURF 33