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Commercial Branding Of Warm-Season Turfgrass Varieties: Implications For Researchers

by Dr. D. S. Loch

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Turfgrass scientists are under obligations to two separate, but complementary, international nomenclatural Codes in relation to the plant names used when reporting their research results. The first of these has long been known as the International Code of Botanical Nomenclature, ICBN or Botanical Code (now expanded to cover algae and fungi as well as plants); the ICBN deals with the application of scientific names to botanical taxonomic groups. The second is the International Code of Nomenclature for Cultivated Plants (ICNCP or Cultivated Plant Code) which deals with the names applied to cultivated varieties in particular. The aim of this paper is to provide a brief historical overview of this topic, to outline key concepts and definitions, and to assess how well researchers are conforming to the Cultivated Plant Code in their nomenclatural usage in publications on warm-season turfgrasses.

Historical Development of the Two Codes

Both nomenclatural codes have a long history of development and revision to refine basic definitions, add new rules and recommendations to cover gaps, and to ensure that their combined coverage is complementary, not contradictory.

The Botanical Code was formally instituted during the 19th century; a detailed early history of the Code can be found in Parkinson (1975). It follows on from the concepts established by Linnaeus in his “Species Plantarum” (1753) with the aim that each taxonomic group of plants (or taxon) should have only one accepted Latin name worldwide. Changes to the ICBN are made at International Botanical Congresses, which are currently run every 6 years by the International Association for Plant Taxonomy. Each new edition of the Botanical Code supersedes

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I was recently having a conversation with someone about which devastating event was going to happen first, the Andromeda galaxy collides and devours the Milky Way galaxy (estimated at up to 8 billion years from now) or the sun in our solar system becomes a red giant (estimated at up to 4 billion years from now). Well it turns out we were both wrong and that the more immediate threat is a Large Magellanic Cloud that will collide with the Milky Way in 2 billion years. At any rate, these events are not worth losing sleep over.

Also, if you have any newsworthy stories or information for readers of International Turfgrass, I hope you will consider submitting an article for the next newsletter in May 2019.

I hope you enjoy the very good articles in this edition.

Sincerely,
Nathan R. Walker

In this Edition

- Commercial Branding Of Warm-Season Turfgrass Varieties: Implications For Researchers
- Report of the Autumn Meeting of the Japanese Society of Turfgrass Science in Niigata, 2018
- Golf clubs as frontrunners for sustainable development in local landscapes
- 6th European Turfgrass Society Field Days - Padova, Italy
- 14th ITRC in Copenhagen – Save the date!
- Introducing some of the new ITS officers
- ITS Membership Application
- ITS Board Members

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earlier editions and is retroactive back to 1753, except where expressly limited. The current edition, called the Shenzhen Code, is the nineteenth and was adopted at the 2017 Congress (Turland et al., 2018).

The first edition of the Cultivated Plant Code was published in 1953 to extend nomenclatural coverage to selected forms and man-made varieties in cultivation – essentially, plants used in horticulture, agriculture and forestry (McNeill, 2004; Trehane, 2004). The ICNCP follows the general structure of the Botanical Code with the one important distinction that cultivated varieties receive non-Latin names. Changes to the Cultivated Plant Code are made at an International Symposium on the Taxonomy of Cultivated Plants conducted at irregular intervals under the auspices of the International Union for Biological Sciences. The current edition – the ninth – was adopted at the sixth Symposium held in China in 2013 (Brickell et al., 2016).

Cultivars

Fundamental and central to the Cultivated Plant Code from the very first edition has been the concept and definition of a cultivar, coined from the defining words “cultivated variety”. The full definition in the 9th Edition (Article 2.3) reads:

A cultivar, as a taxon, is an assemblage of plants that (a) has been selected for a particular character or combination of characters, and (b) remains distinct, uniform, and stable in these characters when propagated by appropriate means.

The Code also specifies how a printed cultivar name is to be presented (Article 14.1):

Cultivar status is indicated by enclosing the cultivar epithet within single quotation marks. Double quotation marks and the abbreviations cv. and var. are not to be used within a name to distinguish cultivar epithets; such use is to be corrected.

Note that the non-Latin word “variety” used in the context of man-made varieties has a different meaning from the Latin term *varietas* (abbreviated as var.) which is used in relation to some lower-level botanical taxa.

When I started my professional career in 1969, the standard abbreviations that preceded a

cultivar name to designate it as a cultivar were “cv.” (singular) and “cvv.” (plural). This custom has since been superseded by the use of single quotation marks around the name, a practice which is also widely specified by scientific journals (at least at first use of a cultivar name) in their current Guides to Authors.

Note also that experimental breeding lines and accessions are not yet cultivated varieties in the commercial sense, so it is incorrect to show any of these experimental genotypes within single quotation marks as reserved for cultivars.

As is the case in the Botanical Code, a cultivar can have only one accepted name, which (with few exceptions) is again determined by priority (Principle 3):

The naming of taxa governed by this Code is based upon priority of publication. Each cultivar ... may bear only one accepted name: the earliest that is in accordance with the Rules, except as provided for within this Code.

On this basis, for example, the registration of Pristine zoysiagrass by Scully et al. (2009) is an illegitimate cultivar name because it is predated by the description of the same material as ‘BA-305’ in US Plant Patent 18415 (dated Jan 15, 2008). Similarly, while ‘Tifway’ hybrid bermudagrass might also be known colloquially among superintendents, curators and sod producers as T-419, Tifton 419, Tif419, 419 Bermuda (Georgia’s Integrated Cultivar Release System, 2018) and Tifway 419, there is only one legitimate cultivar name – ‘Tifway’ – for use in scientific publications; its experimental designation of Tifton 419 (Burton, 1966) was publicized at the time of release, hence the confusion and the numerous variants that have persisted throughout the turf industry for the past almost 60 years.

Trademarks

From its very early days (Second Edition, 1958), the Cultivated Plant Code has explicitly recognized and separated the commercial use of trademarks (now referred to as trade designations) from cultivar names (Trehane, 2004). This distinction has been progressively strengthened over the years with support from delegates to the formal

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International Symposia (e.g. Darke [1995] on behalf of the American Association of Botanic Gardens and Arboreta) and is formally defined as follows in Article 13.1.

A trade designation is not a name regulated under this Code but is a device that has been used for marketing a Cultivar...in place of its accepted name.

Instead, a trademark is a device subject to the law of the land in each country, albeit with international harmonization of the overall legal landscape. The Cultivated Plant Code, however, does specify how the status of trade designations should be shown in Articles 17.1 to 17.3.

Trade designations may not be placed within demarcating quotation marks.

If cited, Trade designations may not be placed within demarcating quotation marks.

If cited, trade designations must always be distinguished typographically from cultivar... epithets.

The Code provides further guidance in Appendix X as to how trade designations should be shown typographically. Among these, the alternative (and arguably the most informative) adopted by ITS in its 2017 Standards for Publishing is to distinguish trademarks registered with a relevant statutory authority by use of the international symbol ® and for trademarks not formally registered to be shown with a superscript ™.

Two Separate Forms of Intellectual Property (IP)

The IP represented by new turfgrass varieties is potentially eligible for registration and protection for 20 years under Plant Breeder's Rights (PBR) or equivalent legislation (including Plant Patents and Plant Variety Protection [PVP] in the US) under the International Convention for the Protection of New Varieties of Plants (UPOV Convention) which was specifically designed to protect new plant varieties developed through traditional breeding methods. The first Act of the UPOV Convention was established in 1961, and is now harmonized across 75 UPOV-member countries worldwide. Under the 1991 Act of the UPOV Convention (Article 1 (vi) - UPOV, 1991), a variety eligible for PBR is:

...a plant grouping within a single botanical taxon of

the lowest known rank, which grouping, irrespective of whether the conditions for the grant of a breeder's right are fully met, can be

- defined by the expression of the characteristics resulting from a given genotype or combination of genotypes;

- distinguished from any other plant grouping by the expression of at least one of the said characteristics; and

- considered as a unit with regard to its suitability for being propagated unchanged.

In this context, it is important to understand that the breeder's right attaches to the actual material that is being protected. Note also the similarities in the wording to the definition of a cultivar in the Cultivated Plant Code.

By way of contrast, a trademark (one of the other seven categories of IP) is a form of words and/or graphics that identifies and distinguishes a particular source of the goods from those of other providers. In the case of plants, a unique trademark can be used to identify, or "brand", a particular variety. Unlike a breeder's right, a trademark does not attach to the material in question, but it can be renewed indefinitely. Trademark law (again harmonized under international treaties) also specifically prohibits a cultivar name being registered as a trademark.

Varietal Branding Strategies Have Changed

Fifty years ago when public funding of turfgrass research and breeding was more generous, the world of turfgrass variety names was much easier to navigate. New cultivars (mostly public and freely available) were developed, released together with a published description, and marketed under that name. As the level of public funding of research declined, the protection of new cultivars in the US under the Plant Patent Act of 1930 (vegetative varieties) and the Plant Variety Protection Act of 1970 (seeded varieties) increased, enabling additional funds to be returned to the breeder and breeding institution through restrictive licensing of proprietary varieties or in other cases providing marketing exclusivity for the seed company that bred the new cultivar. Collectively, these two legal mechanisms constitute the special form of intellectual property known internationally as Plant Breeder's Rights as described earlier.

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Season Turfgrass Cultivars in Recent Research Papers

In the case of cool-season turfgrasses, the 20-year life of PBR protection was not a problem as most varieties were (and still are) superseded by newer improved varieties within that period. In the case of warm-season turfgrasses, however, varietal turnover is much slower and the commercial lifetime of a number of industry standards has lasted well beyond 20 years.

Around the mid-1990s, warm-season turfgrass marketers started to implement the idea of combining a cultivar name with a marketing trademark, or “brand”. For 20 years, the cultivar material is protected under PBR, but by the end of that period all of the value in terms of consumer recognition is in the associated trademark which can then be renewed for as long as required. This strategy is most effective when the cultivar name (usually a code made up of letters and numbers) is quite different from the trademark, as in the US examples shown in Table 1. Attempts to trademark around a cultivar name (e.g. TifEagle For Greens[®], TifEagle Elite[®]) are much less effective once PBR protection has expired because of continuing consumer recognition for the cultivar name (‘TifEagle’) and the fact that anyone else is now free to market that variety under its cultivar name *per se*. Tucker and Ross (2007) provide a more detailed account of branding and the correct use of trademarks in this context.

When using a distinctively different trademark in particular, it is important to show it clearly as a trademark and to differentiate it from the underlying cultivar in any promotional material and marketing communications. In relation to this, note the very specific directions in Article 20, Section 8 of UPOV (1991):

When a variety is offered for sale or marketed, it shall be permitted to associate a trademark, trade name or other similar indication with a registered variety denomination. If such an indication is so associated, the denomination must nevertheless be easily recognizable.

Just as a trademark cannot be the same as the cultivar name, the corollary is that a registered trademark can be lost if it becomes synonymous with a cultivar name.

Assessment of Nomenclature Used for Warm-

My investigations sought to answer a single question, starting with the 61 papers on warm-season turfgrasses presented at the most recent 2017 International Turfgrass Research Conference: are trademarks being confused with cultivar names? Of the 18 papers in which trademarks (marketing names) were mentioned, these were clearly differentiated from cultivar names (as required by the ITS Standards for Publishing) in only three papers; the remaining 15 papers showed only the marketing trademarks and depicted them incorrectly as actual cultivar names. I then extended my analysis to an additional 95 warm-season turfgrass papers presented at the 2009 and 2013 International Turfgrass Research Conferences; 28 papers used the marketing designations, only five of which clearly differentiated these from cultivar names.

Finally, I looked at 302 warm-season turfgrass papers published in the 10 years since 2009 in *Crop Science*, *Agronomy Journal*, *Journal of Environmental Quality*, *Journal of Plant Registrations*, *HortScience*, *HortTechnology*, *Journal of the American Society for Horticultural Science*, and *Weed Technology*. Of these, 101 published papers used marketing names, all of them showing trademarks incorrectly as though they were cultivar names.

While authors are ultimately responsible for the current widespread mis-use of commercial trademarks as though they were cultivar names for warm-season turfgrasses in recent papers, it should be remembered that each of the original manuscripts has also been handled by two or more peer reviewers and at least one editor. This makes the almost total current confusion between cultivar names and marketing trademarks in our profession all the more concerning.

This practice also makes a mockery of the basic purpose behind the standard Materials and Methods section in scientific papers: to enable other scientists to repeat an experiment. How can this be guaranteed when the defined name for a cultivar is actually nothing more than a form of words (a marketing trademark)?

Additionally, I noted a number of other common nomenclatural errors during my

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investigations. Prominent among these was the use of single quotation marks with accessions and experimental lines that are not yet cultivars. There is still residual use of the outdated “cv.” to precede a cultivar name (and this was not infrequently mixed with the use of the single quotation mark format as well). Other more specific errors include:

- ‘Tifgreen’ incorrectly shown as TifGreen and Tifgreen 328;
- ‘Champion Dwarf’ (the proper cultivar name) should not be shortened to Champion;
- ‘Tifway’ is the legitimate (and only) cultivar name for formal use in scientific publications, not Tifway 419 or any other of the numerous colloquial names used informally in the turf industry;
- Care needs to be taken with cultivar names incorporating capital letters within the name: e.g. ‘TifEagle’, FLoraTeX’;
- ‘Princess 77’ (unhyphenated) is the registered US PVP designation (certificate #9500227 – Mar 23, 2001) and is the legitimate cultivar name based on its precedence of publication over the hyphenated form Princess-77 as used by Rogers (2003) and Rogers and Baltensperger (2005).

Nothing, however, demonstrates more clearly the current careless and sloppy approach to cultivar names among too many turfgrass researchers than the misuse of the trademark MiniVerde as a cultivar name with three more incorrect variants: Mini Verde, Mini-Verde and Miniverde.

The Future

Marketing trademarks are not synonymous with cultivar names and should never be treated as such. The correct nomenclatural treatment of these two different terms is not difficult to apply, but requires awareness and care to make the proper distinction and to ensure that there are no spelling or other errors. The challenge to authors (and to reviewers and editors) for the 2021 Conference is to make this distinction in their papers as required by the ITS Standards for Publishing. Always remember that you are reporting your experimental procedures and results to other scientists, not talking to superintendents, curators or sod producers.

References

- Brickell, C.D., Alexander, C., Cubey, J.J., *et al.* (eds.) (2016) *International Code of Nomenclature for Cultivated Plants. Ninth Edition*. Scripta Horticulturae 18. 210 p.
- Burton, G.W. (1966) Tifway (Tifton 419) bermudagrass. *Crop Sci.* 6:93-94.
- Darke, R. (1995) Preserving the distinction between cultivars and trademarks. *Acta Hort.* 413:27.
- Georgia’s Integrated Cultivar Release System (2018) Tifway Bermudagrass. Available online at <http://georgiacultivars.com/cultivars/tifway-bermudagrass> (accessed Dec 24, 2018).
- McNeill, J. (2004) Nomenclature of cultivated plants: A historical botanical standpoint. *Acta Hort.* 634:29-36.
- Parkinson, P.G. (1975) The International Code of Botanical Nomenclature: An historical review and bibliography. *Tane* 21:153-173.
- Rogers, C. (2003) You’ve come a long way, bermuda. *Golf Course Manage.* 71(8):91-95.
- Rogers, C.A. and Baltensperger, A.A. (2005) Registration of bermudagrass parental lines A-3 and A-4. *Crop Sci.* 45:1176.
- Scully, B.T., Nagata, R.T., Cherry, R.H., Trenholm, L.E. and Unruh J.B. (2009) Registration of ‘Pristine’ zoysiagrass. *J. Plant Registr.* 3:65-68.
- Trehane, P. (2004) 50 Years of the International Code of Nomenclature for Cultivated Plants: Future prospects for the Code. *Acta Hort.* 634:17-27.
- Tucker, W.T. and Ross, G.S. (2007) Use of trademarks in a plant-licensing program. In: A. Krattiger, R.T. Mahoney, L. Nelsen, *et al.* (eds.) *Intellectual Property Management in Health and Agricultural Innovation: A Handbook of Best Practices. Volume Two*. MIHR, Oxford, UK, and PIPRA, Davis, USA. p. 1059-1067. Available online at www.ipHandbook.org (accessed Sep 12, 2018).
- Turland, N.J., Wiersema, J.H., Barrie, F.R., *et al.* (eds.) (2018) *International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017*. Regnum Vegetabile 159. Koeltz Botanical Books, Glashütten, Germany. Online version available at <https://www.iapt-taxon.org/nomen/main.php> (accessed Sep 12, 2018).
- UPOV (1991) *Act of 1991: International Convention for the Protection of New Varieties of Plants*. Available online at <http://www.upov.int/export/sites/upov/upovlex/en/conventions/1991/pdf/act1991.pdf> (accessed Sep 12, 2018).

Table 1. Examples of branding of proprietary warm-season turfgrass cultivars using dissimilar trademarks. Source numbers shown are from US Plant Patent and trademark databases.

Botanical taxon	Cultivar		Trademark	
	Name	Source	Brand Name [§]	Serial Number [‡]
<i>Cynodon dactylon</i>	CT-2	PP6841	GN-1	US74647266
	Riley's Super Sport	PP11181	Celebration	US77138459
<i>Cynodon dactylon</i> x <i>C. transvaalensis</i>	Tift 94	PP10079	TifSport	US86005461
	P18	PP12084	MiniVerde	US77694225
	ST-5	PP21017	TifGrand	US77735110
	DT-1	PP27392	TifTuf	US86702383
<i>Eremochloa ophiuroides</i>	BA-417	PP20812	Hammock	US78437877
<i>Paspalum vaginatum</i>	Variety Not Stated	PP3939	Adalayd	US73368276 (dead)
	SDX-1	PP13294	SeaDwarf	US78040394 (dead)
	SI 98	PP18869	Sea Isle Supreme	US77018374 (dead)
	UGA 31	PP25761	SeaStar	US85579841
<i>Stenotaphrum secundatum</i>	SS-100	PP9395	Palmetto	US74602814
	B12	PP16174	Sapphire	US77137950
	TR 6-10	PP17095	AmeriShade	US78208967
	NUF-76	PP21280	Captiva	US77453143
	DALSA 0605	PP27393	TamStar	US86677483
<i>Zoysia japonica</i>	SS-500	PP11466	Empire	US85001963
	SS-300	PP11495	Empress	US75707654
	Z-3	PP8553	Zoy Boy	US74538701 (dead)
	BA-189	PP23716	UltimateFlora	US77154031
<i>Zoysia japonica</i> x <i>Z. pacifica</i>	BA-305	PP18415	PristineFlora	US77154003
			Toccoa Green	US86725008
<i>Zoysia matrella</i>	BK-9	PP27051	Geo	US86838279 (dead)
	P-1	PP6529	Cashmere	US73821037 (dead)

[§] Trademark text may include additional non-specific words (e.g. turf, bermudagrass, St. Augustine, zoysia).

[‡] Trademarks "live" (i.e. currently registered) unless indicated otherwise.

Seminar and Meeting Announcements

by Trygve S. Aamlid

NIBIO Landvik, Reddalsveien 215, 4886 Grimstad

- An invitation to the STERF/NIBIO seminar about Sustainable Pesticide Use on Golf Course to be held 7 March 2019 in Oslo. See attached flyer including link to on-line registration at <https://nibio.pameldingssystem.no/golf-seminar-2019#/>
- A 'save the date' message for NIBIO's Turfgrass Field Day for 2019 on Wednesday 19 June 09.00 – 16.00 at NIBIO Landvik, Grimstad, Norway. As usual we will start with an informal BBQ in the garden at Landvik in the evening before the event, i.e. Tuesday 18 June at 18.00. A detailed program with on-line registration details will be sent out in February.

Report of the Autumn Meeting of the Japanese Society of Turfgrass Science in Niigata, 2018

by Hidenori Aso¹, Satoru Tanaka² and Hideaki Tonogi³

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Faculty of Regional Environment Science, Tokyo University of Agriculture.

³Head, International Relations Committee, Japanese Society of turfgrass Science

The Autumn Meeting of the Japanese Society of Turfgrass Science (JSTS) 2018 was held in Niigata city, Niigata, Japan on September 23rd-25th. The venue was Toki Messe (Fig. 1) which is located at the mouth of Shinano-river, in the heart of Niigata city.



Fig. 1: Toki Messe (Niigata City, Niigata pref., Japan)

The general meeting and keynote lectures were held at the first day afternoon. The keynote lecture speakers and their titles were as follows:

“Turf and Happiness - The effect of turfgrass on life”
Speaker: Mr. Isao Honma, Albirex Niigata Football school Coach, Former Professional Football player
Interviewer: Mr. Hideya Morishita, Namara entertainment company.

“Project for changing soil surface into lawn at schoolyards in Niigata city” by Mr. Mutsumi Kamimura, Assistant manager Facility Section Niigata city board Education.

“Children’s change by lawn” by Ms. Junko Fukuda, Director, Matsunomi 2nd certified center for early childhood education and care

“A lawn connects nature with a child” by Mr. Junichi Hara, Director, Akiha Forest Kindergarten

In the keynote speeches, there was an announcement about turf management from the player’s point of view. It seems that it is possible to make conditions



Fig. 2: The general meeting and keynote lectures.

better through interactions between players and turf managers. In addition to the keynote lecture, there were four presentations on the lawn of the schoolyard and the grounds. Changing schoolyard lawns is not popular due to budget shortages and management staff, but the lawn is quite valuable for education. It was thought that lower costs and labor saving are key to maintain turfed schoolyards. The four groups session were held the first and second day.

These groups included golf courses, ground cover plants, school turf, and parks.

The titles were as follows:

Group 1: Golf courses group:

1. Successful putting green maintenance to avoid severe heat stress during summer periods followed by panel discussion.

Group 2: Park group:

1. Recovering of lawn by stolonizing methodology with machine.
2. Recent trends of park management and new challenge to be utilized the lawn.

Group 3: School turf group:

1. Turfgrass management of the schoolyard by superintendent.
2. Introduction of New developed construction and maintenance method at turfed schoolyard.

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Fig. 3: Golf courses group meeting.

Group 4: Ground cover plants group:

1. The transition to change from economic welfare to environmental welfare.

Field tour of turf application site and technical tour on golf course were held on Day 3. In terms of field tour, we visited a professional football exercise turfed pitch called the Seirou sports center, then Niigata horse race track, and South-Kurosaki elementary school to see turfed school yards. Denka Big Swan stadium is a famous football stadium where the Japan national football team games are often held. In terms of technical tour for the golf course group, they played golf at Nakajo Golf Club where it used to be an area of sand dunes.

The next JSTS annual meeting will be held in Yamanashi University which is located near a large grape production region near Tokyo from June 14th to 16th in 2019.

Golf clubs as frontrunners for sustainable development in local landscapes

by Maria Strandberg, STERF, ITS president, Sweden and Anders Esselin, Man & Nature

Although we are living in fantastic times of wealth and prosperity in the global north, there is a growing concern that our modern lifestyle is unsustainable. Research has shown that we've already crossed several planetary boundaries that defines a safe operating space for humanity. In an effort to deal with this dilemma, the United Nation's 2030 Agenda for Sustainable Development with its 17 Sustainable Development Goals (SDGs) was adopted in 2015. Now, models and methods for implementing the Agenda locally and regionally are called for.

The golf sector has had an image problem with a history as a sport for an exclusive elite. Still, some people view golf courses as isolated islands, inaccessible for non-players and biological "deserts". Many Nordic golf clubs have also experienced profitability problems due to increasing costs, shrinking member stocks, fewer green fee guests, and little support from authorities.

Of course, the game of golf is and should be the foremost priority for all golf clubs. But Nordic golf clubs also have a fantastic opportunity to make substantial contributions to the 2030 Agenda by developing the concept of multi-functional golf facilities, applying a landscape perspective and establish partnership with other landscape actors. Potentially, this will rise the acceptance and legitimacy



Picture 1. The step-by-step workbook.

Continued on next page



Picture 2. Workshop at Linköpings golf club, Sweden. Photo Jacob Coleman Nielsen.

for the game of golf and golf facilities, and in this way help to break the golf clubs' isolation from the rest of society. Developing other values beside golf can also create favorable conditions for attracting a broader target group, new members, alternative income and shared costs.

This study was carried out on three Nordic golf clubs in Denmark, Sweden and Norway. It concludes that golf clubs which are managed responsibly and correctly, especially golf clubs with multi-functional ambitions, contribute significantly in a landscape perspective to the Sustainable Development Goals, e.g. SDG 3 (Good health and well-being), SDG 6 (Clean water and sanitation), SDG 11 (Sustainable cities and communities), SDG 12 (Responsible consumption and production), SDG 15 (Life on Land) and also to SDG 17 (Partnership for the goals).



Picture 3. A hotel for insects at Asserbo G, Denmark. Photo Anders Esselin.



Picture 4. Walk and talk at Larvik Golf Club, Norway. Photo Anders Esselin.

Even if multi-functional activities and projects are undertaken on the golf facilities, the contribution to a sustainable development in a landscape perspective can be profound as there is a constant flow of people with their knowledge and ideas, as well as animals, insects, plants and water from the golf facilities to the surroundings and vice versa.

This study has also identified two fundamental functions of golf facilities: Golf facilities as arenas for collaboration, and Golf clubs as landscape players in the meaning that they can take the lead and be front-runners for the 2030 Agenda implementation process locally and regionally in the Nordic countries. To help golf clubs to develop these functions a step-by-step workbook, tailor-made for golf clubs, has been created. The workbook focuses on how to map values, functions and activities on and beyond golf facilities, and also on how to find key partners and engaging them in multifunctional projects that contribute to sustainable development (the 2030 Agenda).

Information about the project, the final report and the step-by-step handbook can be found at: <http://www.sterf.org/sv/about-sterf/news-archive/handbook-golf-clubs-as-frontrunners-for-sustainable-development-in-local-landscapes>

For further information contact: Maria Strandberg: Maria.strandberg@golf.se or Anders Esselin: anders@mannature.se

6th European Turfgrass Society (ETS) Field Days - Padova, Italy

May 27th - 28th 2019 – SAVE THE DATE!

The European Turfgrass Society, thanks to the collaboration with the University of Padova and the Golf della Montecchia, is pleased to welcome ETS members and other turfgrass specialists to the 6th ETS Field Days in Padova, Italy, on May 27th and 28th, 2019.

The ETS Field days is a two-days event that is organised every two years and it is intended to promote the exchange of information among turfgrass specialists from universities, official bodies, private companies and practical greenkeepers and groundsman.

The seminars will be held at the University of Padova on the morning of the 27th, and at the Golf della Montecchia on the morning of the 28th, while the afternoons of both days will be dedicated to the technical visits.

The Organising Conveners of the Field Days, Dr Stefano Macolino, University of Padova and Alessandro De Luca, Italian Golf Federation, are preparing this international Field Days under the theme: “Transitioning Turfgrasses” for the peculiar climate of this area, and of Italy in general.

With the introduction of the EU Directive on the sustainable use of pesticide, it's forbidden to apply these products. Furthermore, the management of turfgrasses is facing weather extremes due to climate change, legislation restrictions and various environmental challenges. That means it's even more difficult to maintain the turf quality in the transition zone.

It is our ambition to provide a forum to spread innovative applications for the benefit of the turfgrass industry promoting the exchange of information among turfgrass specialists.

For info and registrations: www.turfgrasssocierty.eu/ETSFD_2019/

Program day 1

May 27th - University of Padova

8,00 Bus depart from the Hotel

8,30: Registration

9:00: Agripolis Authorities - University of Padova
Welcome Address

9,15: Dr. Marco Volterrani – Researcher at Certes, University of Pisa. *“Autonomous Mower Saves Energy and Improves Quality of Lawns”*

9,45: Dr. Gerald Henry - Associate Professor - Environmental Turfgrass Science, University of Georgia. *“Site-specific Management for the Reduction of Turfgrass Inputs”*

10,00: Prof. Diego Gomez de Barreda Ferraz – Professor at Universitat Politecnica de Valencia. *“Challenges and opportunities for growing grass in the transition zone”*

10:15 Coffee break

10:45 Dr. Lucia Bortolini – Researcher TESAF, University of Padova. *“High distribution uniformity of irrigation systems to ensure turf quality and efficient use of water”*

11,00: Dr. Cristina Pornaro – Researcher DAFNAE, University of Padova. *“A new hyperspectral based system for the estimation of weeds and botanical composition of turfgrasses”*

11,15: Dr. Geunhwa Jung – Professor of Turfgrass Pathology and Plant Breeding & Genetics University of Massachusetts. *“Dollar spot management: rolling, really?”*

11,30: Sponsor presentations

12,30: Trasfer to the Azienda agricola of the University of Padova & light lunch

13,30: Visit at the experimental plots of the University of Padova

16,30: Trasfer and visit at LandLab Company (Vicenza)

19,00: Dinner at LandLab and close of the day

Program day 2

May 28th - Golf della Montecchia, Selvazzano Dentro - Padova

8,30 Bus depart from the Hotel

9:00: Golf della Montecchia President Dr. Paolo Casati. Welcome Address

9,10: Dr. Michael P. Kenna – Director of Green Section Research USGA. “*An outline of the US experiences on sustainable turfgrass management*”

9,50: Dr. Alessandro De Luca – Responsible of the Turfgrass section for the Italian Golf Federation. “*The experience of “Biogof Case Study” at the Golf della Montecchia*”

10,10: Dr. Stefano Macolino – Professor DAFNAE, University of Padova. “*Study on the naturalization process of roughs*”

10,30: Coffee break

11,00: Dr. Simone Magni – Researcher at Certes, University of Pisa. “*Conversion methods from coolseasons to warmseasons grasses*”

11,20: Dr. Brian Og O’Flaherty – Superintendent of Golf della Montecchia. “*Bermudagrass Maintenance above the 45° parallel*”

11,40: Dr. Massimo Mocioni - Agro Innova, University of Torino. “*Management of the main issues observed without the use of chemicals*”

12,00: Light lunch

13,00: Visit at the Golf Course

15,30: Visit at the University Botanical Garden in Padova

18,00: Visit at the Pratoverde Company, close of the Field Days and final BBQ dinner

Accommodation info

Hotel info

The Resort is located in the stunning area of the Colli Euganei (Euganean Hills), at one of Europe’s most important spa sites, and is just a short distance away from Padova and Venice. It is surrounded by the luxuriant flora of a 350,000 m² natural park.

Radisson Blu Resort Terme di Galzignano

Hotel Sporting

Viale delle Terme 82

35030 Galzignano Terme (PD) – Italy

T. +39 049 9195555

reservations@galzignano.it

<https://www.galzignano.it/en-GB>

IMPORTANT NOTE: please refer to “European Turfgrass Society - ETS Field Days” when you contact the Hotel

Agreed room prices for the 6th ETS Field Days:

Double room, single occupancy: € 95

Double occupancy Bed & Breakfast: € 125

Field days fees and registration

Early bird registration deadline: 1st of April

- ETS or ETP members € 130
- Not ETS members € 180
- Students & Greenkeepers (proof needed) € 050
- Students from University of Padova: € 025

Full registration includes:

Access to Field Days, access to technical tour, coffee breaks, buffet lunches, bus transportation and lunch during the technical tour, Field Days bag (bag, notepad, pen, etc.).

PRE-conference Tour and ACCOMPANYING Persons Tour will available for Venice and Padova.

Further info for registration are available on the website of the Field Days.

Sponsors as of today: thank you!

ETS appreciate the invaluable support provided by Syngenta, ICL-SF, Padana Sementi, Landlab, Pratoverde, Hi-Turf Solutions.

14th International Turfgrass Research Conference in Copenhagen

July 11 - 16 2021 – Save the date!

By Maria Strandberg, ITS president, Sweden



The next International Turfgrass Research Conference will be arranged by STERF (Scandinavian Turfgrass and Environment Research Foundation) in Copenhagen 2021.

The conference will include keynote speakers, oral and poster presentations, industry networking opportunities, technical tours, social events and much more. New for ITRC 2021 is one-day programme for practitioners.

Scientific topics of interest may include: turfgrass establishment and management; turfgrass pests (diseases, weeds, insects et cetera); turfgrass physiology; turfgrass genetics and breeding; soil biology, chemistry and plant nutrition; soil physics and rootzone construction; sustainable water management; ecosystem services and biodiversity; information technology, education and communications.

Technical tours will introduce you in Nordic turfgrass research and development which is focusing on internationally important key areas. These include the pressures from government demands for greater environmental regulation, the increasing pressure on

natural resources (notably water, energy and land), the emerging role of turf management in supporting ecosystem services and enhancing biodiversity, the continued need to promote integrated pest management, and the looming challenges posed by a changing climate, and urgent need to adapt.

The on-day programme for practitioners will strengthen the ambition to take a lead in making research results and new knowledge easy accessible to end-users and to provide support to implement changes, which is a prerequisite for achieving improvement in the sustainable management of turfgrass.

Copenhagen is the congress capital of Scandinavia, and its vibrant cultural heart. Copenhagen is also truly a green city surrounded by water and parks, with climate-friendly citizens to match. The ambitious green profile of the city has a clear goal: The City of Copenhagen aims to become the world's first CO2 neutral capital by 2025. Experience it for yourself. Swim in the clean waters of the city's harbour baths, stay in a sustainable hotel, eat organic, and ride the electric city bikes around the old maritime city.

Please join us in 2021 for the latest cutting-edge research in the turfgrass industry and stay to enjoy all that the Copenhagen area has to offer!

Please visit www.Itrc2021.org to continually get information about the conference.

For more information about STERF please visit www.sterf.org



Nordic turfgrass research.



Copenhagen the green capital.

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Regular Membership Fee (2017-2021)	\$325.00 USD
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Please send comments, feedback, and turfgrass news articles for future issues to the newsletter editor. If you know any non-members, new faculty, staff, and new personnel involved in turfgrass research who might be interested in joining ITS please forward their e-mail address to the newsletter editor and they will also receive the Triannual issues of International Turfgrass.

The deadline for submissions for the next newsletter is April 15, 2019