## CPVO

Community Plant Variety Office

## DISCLAIMER

The present version of the national guideline has been accepted by the President of the CPVO for its use in technical examinations carried out on behalf of the CPVO or for the take-over of reports serving as a basis for a CPVO decision.

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Community Plant Variety Office

## Simplified standard protocol

| Examination office | CREA DC |
| :--- | :--- |
| Reference of the protocol | National protocol |
| Date of preparation of the protocol | $01 / 01 / 2018$ |
| Date of entry into force of the protocol | $01 / 01 / 2018$ |
| Botanical taxon: | Cynodon $x$ magennisii Hurcombe <br> (yyn. Cynodon dactylon x Cynodon <br> transvaalensis Burtt-Davy) |
| Common Name (when known): | Bermudagrass |
| Way of propagation of the plants to be examined | Self or cross-pollinated seed <br> propagated $\square$ <br> Vegetatively propagated $\boxtimes$ |
| Number of growing cycles: | $1 \square$ <br> $2 \boxtimes$ <br> Other $\square$ specify Click or tap here to <br> enter text. |
| List of grouping characteristics | Yes $\square$ if yes put as annex <br> No $\boxtimes$ |
| Minimum number of plants in trial | Vegetative:80 |
| Give description of when observations should take place | The observations take place from <br> June to October and in the next <br> spring for each cycle of trial. |
| Minimum humbere to enter |  |
| text. |  |

## Uniformity:

Cynodon x magennisiï Hurcombe (syn. Cynodon dactylon x Cynodon transvaalensis Burtt-Davy) is a vegetatively propagated species. Therefore, the assessment of uniformity of varieties belonging to this species will be based on the following criteria:

1. For qualitative and pseudo-qualitative characteristics: a population standard of $1 \%$ with an acceptance probability of $95 \%$ is applied. In case of a sample size of 80 , the maximum number of off-types allowed is 2 .
2. For quantitative characteristics measured on continue scale: the uniformity will be assessed through the calculation of standard deviation of each characteristic. Data obtained are subjected to ANOVA with the definition of DMS with $p<0,05$. For quantitative characteristics measured on discontinue scale, , homogeneity is based on the assessment of the frequency distributions. Generally, the homogeneity requirement is satisfied when one modal class or two contiguous classes are clearly present.

| Table of characteristics | Present $\boxtimes$ <br> Not available $\square$ |
| :--- | :--- |
| Literature <br> (when present, please annex to this document) | Present $\square$ <br> Absent $\boxtimes$ |

Table of characteristics

| National n . | Characteristics | Test ** | Note |  | Reference variety |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Ploidy | C QL |  |  |  |
|  | Diploid |  | 2 | $\square$ |  |
|  | Triploid |  | 3 | $\square$ |  |
|  | Tetraploid |  | 4 | $\square$ |  |
| 2. | Leaf sheath: hairness | VS A QN |  |  |  |
|  | Absent o very weak |  | 1 | $\square$ |  |
|  | Weak |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | Strong |  | 7 | $\square$ |  |
|  | Very strong |  | 9 | $\square$ |  |
| 3. | Ligule: shape | $\begin{gathered} \hline \mathrm{VS} \mathrm{~A} \\ \mathrm{PQ} \\ \hline \end{gathered}$ |  |  |  |
|  | Rigid |  | 1 | $\square$ |  |
|  | membranous |  | 2 | $\square$ |  |
|  | Fringed |  | 3 | $\square$ |  |
| 4. | Ligule: anthocyanin coloration | $\begin{gathered} \hline \text { VS A } \\ \text { QN } \\ \hline \end{gathered}$ |  |  |  |
|  | Absent o very weak |  | 1 | $\square$ |  |
|  | Weak |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | Strong |  | 7 | $\square$ |  |
|  | Very strong |  | 9 | $\square$ |  |
| 5. | Plant: time of inflorescence emergence | $\begin{gathered} \hline \text { MS A } \\ \text { QN } \\ \hline \end{gathered}$ |  |  |  |
|  | Early |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | Late |  | 7 | $\square$ |  |
| 6. | Inflorescence: number of spikes | $\begin{gathered} \hline \text { MS A } \\ \text { QN } \\ \hline \end{gathered}$ |  |  |  |
|  | Low |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | High |  | 7 | $\square$ |  |
| 7. | Inflorescence: grow habit of the spikes | $\begin{gathered} \text { VS A } \\ \text { QN } \\ \hline \end{gathered}$ |  |  |  |
|  | Upright |  | 1 | $\square$ |  |
|  | Horizontal |  | 2 | $\square$ |  |
|  | Patent |  | 3 | $\square$ |  |
| 8. | Inflorescence: anthocyanin coloration of spike rachis | VS A QN |  |  |  |
|  | Absent o very weak |  | 1 | $\square$ |  |
|  | Weak |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | Strong |  | 7 | $\square$ |  |
|  | Very strong |  | 9 | $\square$ |  |
| 9. | Flag leaf: green color (at flowering time) | VS A QN |  |  |  |
|  | Light |  | 3 | $\square$ | Bayshore |


| National n. | Characteristics | Test ** | Note |  | Reference variety |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Medium |  | 5 | $\square$ |  |
|  | Dark |  | 7 | $\square$ | Everglades, Floraturf |
|  | Dark bluish |  | 9 | $\square$ | Ormond |
| 10. | Flag leaf: hairness (at flowering time) | $\begin{gathered} \text { VS A } \\ \text { QN } \end{gathered}$ |  |  |  |
|  | Absent o very weak |  | 1 | $\square$ |  |
|  | Weak |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | Strong |  | 7 | $\square$ |  |
|  | Very strong |  | 9 | $\square$ |  |
| 11. | Flag leaf: growth habit (at flowering time) | $\begin{gathered} \hline \mathrm{VSA} \\ \mathrm{QN} \\ \hline \end{gathered}$ |  |  |  |
|  | Erect |  | 1 | $\square$ |  |
|  | Semi-erect |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | Semi-prostrate |  | 7 | $\square$ |  |
|  | Prostrate |  | 9 | $\square$ |  |
| 12. | Flag leaf: length (at flowering time) | $\begin{gathered} \hline \text { MS A } \\ \text { QN } \\ \hline \end{gathered}$ |  |  |  |
|  | Short |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | Long |  | 7 | $\square$ |  |
| 13. | Flag leaf: width (at flowering time) | $\begin{gathered} \hline \text { MS A } \\ \text { QN } \\ \hline \end{gathered}$ |  |  |  |
|  | Narrow |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | Broad |  | 7 | $\square$ |  |
| 14. | Plant: growth habit of the tuft (at flowering time) | $\begin{gathered} \text { VS A } \\ \text { QN } \\ \hline \end{gathered}$ |  |  |  |
|  | Erect |  | 1 | $\square$ |  |
|  | Semi-erect |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | Semi-prostrate |  | 7 | $\square$ |  |
|  | Prostrate |  | 9 | $\square$ | Floraturf |
| 15. | Plant: natural height (at flowering time) | $\begin{gathered} \text { MS A } \\ \text { QN } \\ \hline \end{gathered}$ |  |  |  |
|  | Very short |  | 1 | $\square$ |  |
|  | Short |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | Tall |  | 7 | $\square$ |  |
|  | Very tall |  | 9 | $\square$ |  |
| 16. | Plant: length of longest stem, inflorescence included (at flowering time) | $\begin{gathered} \hline \text { MS A } \\ \text { QN } \\ \hline \end{gathered}$ |  |  |  |
|  | Very short |  | 1 | $\square$ |  |
|  | Short |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | Tall |  | 7 | $\square$ |  |
|  | Very tall |  | 9 | $\square$ |  |


| National n. | Characteristics | Test ** | Note |  | Reference variety |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17. | Plant: shape of the longest stem in the middle part of the upper internode (at flowering time) | $\begin{gathered} \hline \mathrm{VS} \mathrm{~A} \\ \mathrm{PQ} \\ \hline \end{gathered}$ |  |  |  |
|  | Flat |  | 1 | $\square$ |  |
|  | Oval |  | 2 | $\square$ |  |
|  | Round |  | 3 | $\square$ |  |
| 18. | Plant: density of the tuft (at flowering time) | VS A QN |  |  |  |
|  | Lax |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | Dense |  | 7 | $\square$ |  |
| 19. | Main stolon: length (at the end of flowering time) | $\begin{gathered} \hline \text { MS A } \\ \text { QN } \\ \hline \end{gathered}$ |  |  |  |
|  | Short |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | Long |  | 7 | $\square$ |  |
| 20. | Main stolon: number of nodes | $\begin{gathered} \text { MS A } \\ \text { QN } \\ \hline \end{gathered}$ |  |  |  |
|  | Low |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | High |  | 7 | $\square$ |  |
| 21. | Main stolon: antocyanin pigmentation | $\begin{gathered} \hline \text { VS A } \\ \text { QN } \\ \hline \end{gathered}$ |  |  |  |
|  | Absent o very weak |  | 1 | $\square$ |  |
|  | Weak |  | 3 | $\square$ |  |
|  | Medium |  | 5 | $\square$ |  |
|  | Strong |  | 7 | $\square$ |  |
|  | Very strong |  | 9 | $\square$ |  |

## Legend:

A = observation on single spaced plants in field
C = laboratory analysis on plant material (young apex and leaves) collected from spaced plants in field.
VS: visual assessment by observation of individual plants or parts of plant
MS: measurement of a number of individual plants or parts of plant

