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|  | S |
| Unión Internacional para la Protección de las Obtenciones Vegetales |  |

|  |  |
| --- | --- |
| Comité TécnicoQuincuagésima novena sesiónGinebra, 23 y 24 de octubre de 2023 | TC/59/18Original: InglésFecha: 21 de septiembre de 2023 |

Revisión parcial de las directrices de examen de la lechuga

Documento preparado por un experto los Países Bajos

Descargo de responsabilidad: el presente documento no constituye un documento de política u orientación de la UPOV

Este documento se ha generado mediante traducción automática y no puede garantizarse su exactitud. Por lo tanto, el texto en el idioma original es la única versión auténtica.

 El presente documento tiene por finalidad exponer una propuesta de revisión parcial de las directrices de examen de la lechuga (documento TG/13/11 Rev. 2).

 En su quincuagésima séptima sesión[[1]](#footnote-2), el Grupo de Trabajo Técnico sobre Hortalizas (TWV), examinó una propuesta de revisión parcial de las directrices de examen de la lechuga (*Lactuca sativa* L.) conforme a los documentos TG/13/11 Rev. 2 y TWV/57/12 “*Partial revision of the Test Guidelines for Lettuce”* y propuso los siguientes cambios (véase el párrafo 68 del documento TWV/57/26 “*Report*”):

1. Adición de “Resistencia a *Bremia lactucae* (Bl) Aislado Bl: 36EU”, incluidas las variedades ejemplo;
2. Revisión de la explicación Ad. 38 a 52 “Resistencia a *Bremia lactucae* (Bl)”;
3. Inclusión de caracteres de la tabla de caracteres en el Cuestionario Técnico (sólo en inglés)

 Los cambios propuestos se indican a continuación como texto resaltado y subrayado (inserción) y ~~tachado~~ (eliminación).

Adición de “Resistencia a *Bremia lactucae* (Bl) Aislado Bl: 36EU”

|  |  | English | français | deutsch | español | Example VarietiesExemplesBeispielssortenVariedades ejemplo | Note/Nota |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **53.** |  | **QL** | **VG** | **(+)** |  |  |
|  |  |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 36EU** |

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|  |
| --- |
| **Résistance à *Bremia lactucae* (Bl) Isolat Bl: 36EU** |

 |

|  |
| --- |
| **Resistenz gegen *Bremia lactucae* (Bl) Isolat Bl: 36EU** |

 |

|  |
| --- |
| **Resistencia a *Bremia lactucae* (Bl) Aislado Bl: 36EU** |

 |  |  |
|  |  | absent | absente | fehlend | ausente | Bartoli, RYZ2164 | 1 |
|  |  | present | présente | vorhanden | presente | Design, Kibrille | 9 |

 Se propone incluir el nuevo carácter 53 en el capítulo 10 "Cuestionario Técnico", sección 5 " Caracteres de la variedad que se deben indicar".

## Revisión de la explicación Ad. 38 a 52 “Resistencia a *Bremia lactucae* (Bl)”

Ad. 38 to ~~52~~ 53: Resistencia a *Bremia lactucae* (Bl), varios aislados

|  |  |  |
| --- | --- | --- |
| 1. | Agente patógeno | *Bremia lactucae* |
| 2. | Estado de cuarentena | no |
| 3. | Especie huésped | lechuga: *Lactuca sativa* L. |
| 4. | Fuente del inóculo | GEVES[[2]](#footnote-3) (FR) o *Naktuinbouw*[[3]](#footnote-4) (NL) |
| 5. | Aislado | Bl: 16EU,17EU, 20-27EU, 29-31EU, 33EU, 35EU, 36EU |
| 6. | Establecimiento de la identidad del aislado | prueba en variedades diferenciales (véase el cuadro que figura más adelante) |
| 7. | Establecimiento de la capacidad patógena | prueba en variedades susceptibles |
| 8. | Multiplicación del inóculo |  |
| 8.2 | Variedad de multiplicación | variedad susceptible, por ejemplo Green Towers.~~Para aislados superiores,~~ Para aislados con un número de superior a Bl: 16EU, quizás sea preferible una variedad con resistencia vencida para mantener a punto el aislado. |
| 8.8 | Período de conservación/viabilidad del inóculo | 2 horas a temperatura ambiente; 2 días en el frigorífico |
| 9. | Formato del examen |  |
| 9.1 | Número de plantas por genotipo | 20 como mínimo |
| 9.2 | Número de repeticiones | - |
| 9.3 | Variedades de control | variedades diferenciales (informativas) (véase el cuadro que figura más adelante) |
| 9.4 | Diseño del ensayo | - |
| 9.5 | Lugar del ensayo | sala climatizada |
| 9.6 | Temperatura | 15°C-18°C |
| 9.7 | Luz | adecuada para obtener un buen crecimiento de la planta; las plántulas no deberán ser ahiladas. opción: se reducirá la iluminación 24 horas después de la inoculación |
| 9.8 | Estación | - |
| 9.9 | Medidas especiales | las plantas pueden cultivarse en papel secante humedecido, con o sin solución nutriente, en arena o en tierra para macetas (véase el punto 13). la humedad elevada (> 90%) es esencial para la infección y la esporulación. |
| 10. | Inoculación |  |
| 10.1 | Preparación del inóculo | se lavan las hojas agitándolas vigorosamente en un recipiente cerrado |
| 10.2 | Cuantificación del inóculo | recuento de esporas; la densidad de las esporas debe ser de 3 x 104 - 1 x 105 |
| 10.3 | Estado de desarrollo en el momento de la inoculación | fase de cotiledón |
| 10.4 | Método de inoculación | se rocían las hojas hasta cubrirlas completamente con la solución. opción: se reducirá la iluminación 24 horas después de la inoculación |
| 10.5 | Primera observación | comienzo de la esporulación en variedades susceptibles (aproximadamente 7 días después de la inoculación) |
| 10.6 | Segunda observación | 3-4 días después de la primera observación (aproximadamente 10 días después de la inoculación) |
| 10.7 | Observaciones finales | 14 días después de la inoculación. es posible que con dos de estas tres observaciones sea suficiente; se puede optar por una tercera notación para observar la evolución de los síntomas en caso de duda. El día de máxima esporulación debe tener lugar en este período. |
| 11. | Observaciones |  |
| 11.1 | Método | observación visual de la esporulación y la reacción necrótica a la infección |
| 11.2 | Escala de observación | resistente:clase 0 ausencia de esporulación y de necrosisclase 1 ausencia de esporulación y presencia de necrosisclase 2 esporulación débil (muy inferior a la del control susceptible) con necrosisclase 3 esporulación débil (inferior a la del control susceptible y no se produce entre la segunda y la tercera observación) con necrosisclase 4 esporulación muy escasa (no se produce entre la segunda y la tercera observación) sin necrosissusceptibles:clase 5 disminución de la esporulación (en comparación con el control susceptible) sin necrosisclase 6 esporulación normal sin necrosis |
| 11.3 | Validación del ensayo | por comparación con variedades estándar en caso de esporulación normal (mismo nivel que el control susceptible) con necrosis, se debe llevar a cabo otro ensayo en plantas más grandes o en otro sustrato |
| 12. | Interpretación de los datos en función de los niveles de los caracteres de la UPOV | clases 0, 1, 2, 3 y 4: resistentesclases 5 y 6: susceptibles |
| 13. | Puntos de control esenciales | reacción de las variedades estándar (la presión infecciosa puede variar entre los experimentos, dando lugar a ligeras diferencias en la intensidad de la esporulación); cuando las reacciones no sean claras deberá repetirse el experimento.Para observar la necrosis se puede utilizar la siembra en tierra, pero es posible que la esporulación sea débil (muy inferior a la del control susceptible); cuando el ensayo se lleve a cabo en arena, las esporas se pueden confundir con granos de arena. En caso de emplearse una solución nutritiva sobre papel secante, se podrá añadir un fungicida para evitar la contaminación por saprófitos. |

A título de referencia: la *International Bremia Evaluation Board* (IBEB) actualiza periódicamente el cuadro de reacción de los huéspedes diferenciales. En la siguiente dirección de la ISF:
<http://www.worldseed.org/our-work/plant-health/other-initiatives/ibeb/> puede consultarse el cuadro más reciente. Se presentan también fotografías de la escala de observación.



**Aislados**

La resistencia se indica con - o (-), la susceptibilidad con + o (+). Los corchetes indican un nivel de expresión del fenotipo más bajo y a veces variable.

Inclusión de caracteres de la tabla de caracteres en el Cuestionario Técnico (sólo en inglés)

 Se propone incluir los siguientes caracteres en el cuestionario técnico (las propuestas de inclusión se indican como texto resaltado y subrayado):

|  |  |  |  |
| --- | --- | --- | --- |
| **Char. No.** | **(\*)** | **Characteristic Name** | **Comments** |
| 1 | (\*) | Seed: color |  |
| 6 | (\*) | Leaf: number of divisions |  |
| 11 | (\*) | Leaf: anthocyanin coloration |  |
| 12 | (\*) | Leaf: hue of anthocyanin coloration |  |
| 13 |  | Leaf: area covered by anthocyanin coloration |  |
| 14 | (\*) | Leaf: color |  |
| 15 | (\*) | Leaf: intensity of green color |  |
| 34 |  | Only varieties with Plant: degree of overlapping of upper part of leaves: medium or strong: Time of harvest maturity |  |
| 35 | (\*) | Time of beginning of bolting |  |
| 38 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 16EU |  |
| 39 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 17EU |  |
| 40 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 20EU |  |
| 41 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 21EU |  |
| 42 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 22EU |  |
| 43 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 23EU |  |
| 44 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 24EU |  |
| 45 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 25EU |  |
| 46 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 26EU |  |
| 47 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 27EU |  |
| 48 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 29EU |  |
| 49 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 30EU |  |
| 50 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 31EU |  |
| 51 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 33EU |  |
| 52 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 35EU |  |
| 53 |  | Resistance to *Bremia lactucae* (Bl) Isolate Bl: 36EU |  |
| 54 |  | Resistance to Lettuce mosaic virus (LMV) Pathotype II |  |
| 55 |  | Resistance to *Nasonovia ribisnigri* (Nr) Biotype Nr: 0  |  |
| 56 |  | Resistance to Fusarium oxysporum f. sp. lactucae (Fol) Race 1 |  |

|

|  |  |  |
| --- | --- | --- |
| TECHNICAL QUESTIONNAIRE | Page {x} of {y} | Reference Number: |

 |
|   |
|

|  |  |
| --- | --- |
| 5. | Characteristics of the variety to be indicated (the number in brackets refers to the corresponding characteristic in Test Guidelines; please mark the note which best corresponds). |
|  |   |  |  |

 |
|  | Characteristics | Example Varieties | Note |
|

|  |
| --- |
| **5.1** |

|  |
| --- |
| **(1)** |

 |

|  |
| --- |
| **Seed: color** |

 |  |  |
|  |

|  |
| --- |
| white |

 |

|  |
| --- |
| Verpia |

 |

|  |
| --- |
| 1 [   ] |

 |
|  |

|  |
| --- |
| yellow |

 |

|  |
| --- |
| Durango |

 |

|  |
| --- |
| 2 [   ] |

 |
|  |

|  |
| --- |
| brown |

 |

|  |
| --- |
| Oaklin |

 |

|  |
| --- |
| 3 [   ] |

 |
|  |

|  |
| --- |
| black |

 |

|  |
| --- |
| Kagraner Sommer 2 |

 |

|  |
| --- |
| 4 [   ] |

 |
| **5.2(6)** |

|  |
| --- |
| **Leaf: number of divisions** |

 |  |  |
|  | absent or very few | Fiorella, Lollo rossa |

|  |
| --- |
| 1 [   ] |

 |
|  | very few to few |  |

|  |
| --- |
| 2 [   ] |

 |
|  | few | Curletta, Rodagio |

|  |
| --- |
| 3 [   ] |

 |
|  | few to medium |  |

|  |
| --- |
| 4 [   ] |

 |
|  | medium | Ezabel, Jadigon  |

|  |
| --- |
| 5 [   ] |

 |
|  | medium to many |  |

|  |
| --- |
| 6 [   ] |

 |
|  | many | Expedition, Multired 54 |

|  |
| --- |
| 7 [   ] |

 |
|  | many to very many |  |

|  |
| --- |
| 8 [   ] |

 |
|  | very many | Excite, Ezfrill, Telex |

|  |
| --- |
| 9 [   ] |

 |
|

|  |
| --- |
| **5.3** |

|  |
| --- |
| **(11)** |

 |

|  |
| --- |
| **Leaf: anthocyanin coloration** |

 |  |  |
|  |

|  |
| --- |
| absent or very weak |

 |

|  |
| --- |
| Clarion |

 |

|  |
| --- |
| 1 [   ] |

 |
|  |

|  |
| --- |
| very weak to weak |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 2 [   ] |

 |
|  |

|  |
| --- |
| weak |

 |

|  |
| --- |
| Du bon jardinier |

 |

|  |
| --- |
| 3 [   ] |

 |
|  |

|  |
| --- |
| weak to medium |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 4 [   ] |

 |
|  |

|  |
| --- |
| medium |

 |

|  |
| --- |
| Lollo rossa, Luana |

 |

|  |
| --- |
| 5 [   ] |

 |
|  |

|  |
| --- |
| medium to strong |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 6 [   ] |

 |
|  |

|  |
| --- |
| strong |

 |

|  |
| --- |
| Merveille des quatre saisons |

 |

|  |
| --- |
| 7 [   ] |

 |
|  |

|  |
| --- |
| strong to very strong |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 8 [   ] |

 |
|  |

|  |
| --- |
| very strong |

 |

|  |
| --- |
| Iride, Revolution |

 |

|  |
| --- |
| 9 [   ] |

 |
| **5.4(12)** |

|  |
| --- |
| **Leaf: hue of anthocyanin coloration** |

 |  |  |
|  | reddish | Lollo rossa |

|  |
| --- |
| 1 [   ] |

 |
|  | purplish | Iride |

|  |
| --- |
| 2 [   ] |

 |
|  | brownish | Luana, Maravilla de Verano |

|  |
| --- |
| 3 [   ] |

 |
|  | Characteristics | Example Varieties | Note |
| **5.5(13)** | **Leaf: area covered by anthocyanin coloration** |  |  |
|  | very small | Steirer Krauthauptel |

|  |
| --- |
| 1 [   ] |

 |
|  | very small to small |  |

|  |
| --- |
| 2 [   ] |

 |
|  | small | Diablo |

|  |
| --- |
| 3 [   ] |

 |
|  | small to medium |  |

|  |
| --- |
| 4 [   ] |

 |
|  | medium | Luana |

|  |
| --- |
| 5 [   ] |

 |
|  | medium to large |  |

|  |
| --- |
| 6 [   ] |

 |
|  | large | Merveille des quatre saisons |

|  |
| --- |
| 7 [   ] |

 |
|  | large to very large |  |

|  |
| --- |
| 8 [   ] |

 |
|  | very large | Bijou, Revolution |

|  |
| --- |
| 9 [   ] |

 |
| **5.6(14)** | **Leaf: color** |  |  |
|  | green | Verpia |

|  |
| --- |
| 1 [   ] |

 |
|  | yellowish green | Dorée de printemps |

|  |
| --- |
| 2 [   ] |

 |
|  | greyish green | Celtuce, Du bon jardinier |

|  |
| --- |
| 3 [   ] |

 |
|

|  |
| --- |
| **5.7** |

|  |
| --- |
| **(15)** |

 |

|  |
| --- |
| **Leaf: intensity of green color** |

 |  |  |
|  |

|  |
| --- |
| very light |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 1 [   ] |

 |
|  |

|  |
| --- |
| very light to light |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 2 [   ] |

 |
|  |

|  |
| --- |
| light |

 |

|  |
| --- |
| Blonde maraîchère, Lollo Bionda |

 |

|  |
| --- |
| 3 [   ] |

 |
|  |

|  |
| --- |
| light to medium |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 4 [   ] |

 |
|  |

|  |
| --- |
| medium |

 |

|  |
| --- |
| Aquarel, Clarion |

 |

|  |
| --- |
| 5 [   ] |

 |
|  |

|  |
| --- |
| medium to dark |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 6 [   ] |

 |
|  |

|  |
| --- |
| dark |

 |

|  |
| --- |
| Expedition, Verpia |

 |

|  |
| --- |
| 7 [   ] |

 |
|  |

|  |
| --- |
| dark to very dark |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 8 [   ] |

 |
|  |

|  |
| --- |
| very dark |

 |

|  |
| --- |
| Pascal, Verdetrix |

 |

|  |
| --- |
| 9 [   ] |

 |
| **5.8(34)** | **Only varieties with Plant: degree of overlapping of upper part of leaves: medium or strong: Time of harvest maturity** |  |  |
|  | very early | Gotte jaune d'or |

|  |
| --- |
| 1 [   ] |

 |
|  | very early to early |  |

|  |
| --- |
| 2 [   ] |

 |
|  | early | Pantlika, Sucrine |

|  |
| --- |
| 3 [   ] |

 |
|  | early to medium |  |

|  |
| --- |
| 4 [   ] |

 |
|  | medium | Clarion |

|  |
| --- |
| 5 [   ] |

 |
|  | medium to late |  |

|  |
| --- |
| 6 [   ] |

 |
|  | late | Blonde maraîchère, Calmar |

|  |
| --- |
| 7 [   ] |

 |
|  | late to very late |  |

|  |
| --- |
| 8 [   ] |

 |
|  | very late | El Toro, Pinokkio | 9 [   ] |

|

|  |  |  |
| --- | --- | --- |
| TECHNICAL QUESTIONNAIRE | Page {x} of {y} | Reference Number: |

 |
|   |
|  | Characteristics | Example Varieties | Note |
|

|  |
| --- |
| **5.9** |
|  **(35)** |

 |

|  |
| --- |
| **Time of beginning of bolting** |

 |  |  |
|  |

|  |
| --- |
| very early |

 |

|  |
| --- |
| Blonde à couper améliorée |

 |

|  |
| --- |
| 1 [   ] |

 |
|  |

|  |
| --- |
| very early to early |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 2 [   ] |

 |
|  |

|  |
| --- |
| early |

 |

|  |
| --- |
| Gotte à graine blanche |

 |

|  |
| --- |
| 3 [   ] |

 |
|  |

|  |
| --- |
| early to medium |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 4 [   ] |

 |
|  |

|  |
| --- |
| medium |

 |

|  |
| --- |
| Pantlika |

 |

|  |
| --- |
| 5 [   ] |

 |
|  |

|  |
| --- |
| medium to late |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 6 [   ] |

 |
|  |

|  |
| --- |
| late |

 |

|  |
| --- |
| Hilde II |

 |

|  |
| --- |
| 7 [   ] |

 |
|  |

|  |
| --- |
| late to very late |

 |

|  |
| --- |
|  |

 |

|  |
| --- |
| 8 [   ] |

 |
|  |

|  |
| --- |
| very late |

 |

|  |
| --- |
| Erika, Roxette |

 |

|  |
| --- |
| 9 [   ] |

 |
| **5.10(38)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 16EU** |

 |  |  |
|  | absent | Green Towers | 1 [   ] |
|  | present | Argelès | 9 [   ] |
|  | not tested |  | [   ] |
| **5.11(39)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 17EU** |

 |  |  |
|  | absent | Green Towers | 1 [   ] |
|  | present | Argelès | 9 [   ] |
|  | not tested |  | [   ] |
| **5.12(40)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 20EU** |

 |  |  |
|  | absent | Green Towers | 1 [   ] |
|  | present | FrRsal-1 | 9 [   ] |
|  | not tested |  | [   ] |
| **5.13(41)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 21EU** |

 |  |  |
|  | absent | Green Towers | 1 [   ] |
|  | present | Argelès, Colorado | 9 [   ] |
|  | not tested |  | [   ] |
| **5.14(42)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 22EU** |

 |  |  |
|  | absent | Green Towers | 1 [   ] |
|  | present | FrRsal-1 | 9 [   ] |
|  | not tested |  | [   ] |
| **5.15(43)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 23EU** |

 |  |  |
|  | absent | Green Towers | 1 [   ] |
|  | present | Colorado | 9 [   ] |
|  | not tested |  | [   ] |

|

|  |  |  |
| --- | --- | --- |
| TECHNICAL QUESTIONNAIRE | Page {x} of {y} | Reference Number: |

 |
|   |
|  | Characteristics | Example Varieties | Note |
| **5.16(44)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 24EU** |

 |  |  |
|  | absent | Argelès, Colorado | 1 [   ] |
|  | present | Dandie, NunDm15, UCDm14 | 9 [   ] |
|  | not tested |  | [   ] |
| **5.17(45)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 25EU** |

 |  |  |
|  | absent | Colorado | 1 [   ] |
|  | present | Argelès | 9 [   ] |
|  | not tested |  | [   ] |
| **5.18(46)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 26EU** |

 |  |  |
|  | absent | Colorado | 1 [   ] |
|  | present | Balesta, Bedford | 9 [   ] |
|  | not tested |  | [   ] |
| **5.19(47)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 27EU** |

 |  |  |
|  | absent | Balesta, Colorado | 1 [   ] |
|  | present | FrRsal-1 | 9 [   ] |
|  | not tested |  | [   ] |
| **5.20(48)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 29EU** |

 |  |  |
|  | absent | Argelès | 1 [   ] |
|  | present | Balesta | 9 [   ] |
|  | not tested |  | [   ] |
| **5.21(49)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 30EU** |

 |  |  |
|  | absent | Argelès, Colorado | 1 [   ] |
|  | present | Balesta | 9 [   ] |
|  | not tested |  | [   ] |
| **5.22(50)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 31EU** |

 |  |  |
|  | absent | Colorado, RYZ910457 | 1 [   ] |
|  | present | Argelès, Balesta | 9 [   ] |
|  | not tested |  | [   ] |
| **5.23(51)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 33EU** |

 |  |  |
|  | absent | Kibrille, RYZ2164 | 1 [   ] |
|  | present | RYZ910457 | 9 [   ] |
|  | not tested |  | [   ] |

|

|  |  |  |
| --- | --- | --- |
| TECHNICAL QUESTIONNAIRE | Page {x} of {y} | Reference Number: |

 |
|   |
|  | Characteristics | Example Varieties | Note |
| **5.24(52)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 35EU** |

 |  |  |
|  | absent | Design, Kibrille | 1 [   ] |
|  | present | Bartoli | 9 [   ] |
|  | not tested |  | [   ] |
| **5.25(53)** |

|  |
| --- |
| **Resistance to *Bremia lactucae*(Bl) Isolate Bl: 36EU** |

 |  |  |
|  | absent | Bartoli, RYZ2164 | 1 [   ] |
|  | present | Design, Kibrille | 9 [   ] |
|  | not tested |  | [   ] |
| **5.26(54)** | **Resistance to *Lettuce mosaic virus* (LMV) Pathotype II** |  |  |
|  | absent | Bijou, Hilde II, Sprinter, Sucrine | 1 [   ] |
|  | present | Capitan, Corsica | 9 [   ] |
|  | not tested |  | [   ] |
| **5.27(55)** |

|  |
| --- |
| **Resistance to *Nasonovia ribisnigri* (Nr) Biotype Nr: 0** |

 |  |  |
|  | absent | Abel, Green Towers, Nadine | 1 [   ] |
|  | present | Barcelona, Bedford, Dynamite, Silvinas | 9 [   ] |
|  | not tested |  | [   ] |
| **5.28(56)** | **Resistance to *Fusarium oxysporum* f.sp. *lactucae* (Fol) Race 1** |  |  |
|  | susceptible | Cobham Green, Patriot | 1 [   ] |
|  | moderately resistant | Affic, Fuzila, Natexis | 2 [   ] |
|  | highly resistant | Costa Rica No. 4, Romasol | 3 [   ] |
|  | not tested |  | [   ] |

[Fin del documento]

1. celebrada en Antalya (Türkiye) del 1 al 5 de mayo de 2023. [↑](#footnote-ref-2)
2. matref@geves.fr [↑](#footnote-ref-3)
3. resistentie@naktuinbouw.nl [↑](#footnote-ref-4)