

| No. | Characteristics | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Candidate | similar1 | Similar 2 |
|-----------|--|-----|----------------------------------|---------------------|-------------------|----------------------|---------------------|----------------|-------------------|-------------------|------------------------|-----------|----------|-----------|
| 1-QN | First leaf: anthocyanin coloration of sheath | | absent or very weak | | weak | | medium | | strong | | very strong | | | |
| 2-PQ | First leaf: shape of apex | | pointed | pointed to rounded | rounded | Rounded to spatulate | spatulate | | | | | | | |
| 3-QN | Foliage: intensity of green color | | | | light | | medium | | dark | | | | | |
| 4-QN | Leaf: undulation of margin of blade | | absent or very weak | intermediate | strong | | | | | | | | | |
| 5-QN | Leaf: angle between blade and stem | | Very small | | small | | medium | | large | | Very large | | | |
| 6-QN | Leaf: curvature of blade | | absent or very slightly recurved | | slightly recurved | | moderately recurved | | strongly recurved | | very strongly recurved | | | |
| 7-QN | Stem: degree of zig-zag | | absent or very slight | slight | strong | | | | | | | | | |
| 8*_ QN | Tassel: time of anthesis | day | Very early | Very early to early | early | Early to medium | medium | Medium to late | late | Late to very late | Very late | | | |
| 9*_ QN | Tassel: anthocyanin coloration at base of glume | | absent or very weak | | weak | | medium | | strong | | very strong | | | |

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|------------|--|-----|----------------------------------|---------------------|-------------------|-----------------|---------------------|----------------|-----------------|-------------------|----------------------|--|--|--|--|
| 10-QN | Tassel: anthocyanin coloration of glumes excluding base | | absent or very weak | | weak | | medium | | strong | | very strong | | | | |
| 11-QN | Tassel: anthocyanin coloration of anthers | | absent or very weak | | weak | | medium | | strong | | very strong | | | | |
| 12-QN | Tassel: angle between main axis and lateral branches | | very small | | small | | medium | | large | | Very large | | | | |
| 13-QN | Tassel: curvature of lateral branches | | absent or very slightly recurved | | slightly recurved | | moderately recurved | | strong recurved | | Very strong recurved | | | | |
| 14*- QN | Tassel: number of primary lateral branches | | absent or very few | | few | | medium | | many | | Very many | | | | |
| 15-QN | Ear: time of silk emergence | day | Very early | Very early to early | early | Early to medium | medium | Medium to late | late | Late to very late | Very late | | | | |
| 16-QN | Ear: anthocyanin coloration of silks | | absent or very weak | | weak | | medium | | strong | | very strong | | | | |
| 17-QN | Stem: anthocyanin coloration of brace roots | | absent or very weak | | weak | | medium | | strong | | very strong | | | | |
| 18-QN | Tassel: density of spikelets | | Moderately lax | | medium | | Moderately dense | | | | | | | | |

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|----------|--|----|---------------------|--|-------|--|--------|--|--------|--|-------------|--|--|--|--|
| 19-QN | Leaf: anthocyanin coloration of sheath | | absent or very weak | | weak | | medium | | strong | | very strong | | | | |
| 20-QN | Stem: anthocyanin coloration of internodes | | absent or very weak | | weak | | medium | | strong | | very strong | | | | |
| 21-QN | Tassel: length of main axis above lowest lateral branch | cm | very short | | short | | medium | | long | | Very long | | | | |
| 22*-QN | Tassel: length of main axis above <u>highest</u> lateral branch | cm | very short | | short | | medium | | long | | Very long | | | | |
| 23-QN | Tassel: length of lateral branch | cm | very short | | short | | medium | | long | | Very long | | | | |
| 24.1*-QN | <u>Only inbred lines and varieties with ear type of grain: sweet or pop: Plant: length</u> | mm | very short | | short | | medium | | long | | Very long | | | | |

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|--------|---|--|-------|-----------------|--------------|---------------|--------|------------|-------|--------|----------|------------|--|--|--|
| 33-QN | <u>Only varieties with ear type of grain:</u> <u>sweet:</u> Grain: intensity of yellow color | | | | light | | medium | | dark | | | | | | |
| 34-QN | <u>Only varieties with ear type of grain:</u> <u>sweet:</u> Grain: length | | | | short | | medium | | long | | | | | | |
| 35-QN | <u>Only varieties with ear type of grain:</u> <u>sweet:</u> Grain: width | | | | narrow | | medium | | broad | | | | | | |
| 36*-QL | <u>Ear: type of grain</u> | | flint | flint-like | intermediate | dent-like | dent | sweet | pop | waxy | flour | | | | |
| 37*-QN | <u>Only varieties with ear type of grain:</u> <u>sweet:</u> <u>Ear:</u> <u>shrinkage of top of grain</u> | | | weak | | medium | | strong | | | | | | | |
| 38*-PQ | <u>Ear: color of top of grain</u> | | white | yellowish white | yellow | yellow orange | orange | red orange | red | purple | brownish | blue black | | | |
| 39*-PQ | <u>Excluding varieties with ear type of grain:</u> <u>sweet:</u> <u>Ear: color of dorsal side of grain</u> | | white | yellowish white | yellow | yellow orange | orange | red orange | red | purple | brownish | blue black | | | |

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|--------|---|--|---------------------|--------------|----------|--|--------|--|--------|--|-------------|---------------------|--|--|--|--|--|--|--|--|--|--|
| 40-QN | <u>Only varieties with ear type of grain: pop: Type of popped grain</u> | | butterfly | intermediate | globular | | | | | | | | | | | | | | | | | |
| 41*-QN | Ear: anthocyanin coloration of glumes of cob | | absent or very weak | | weak | | medium | | strong | | very strong | absent or very weak | | | | | | | | | | |

Note setting table for measurement data

| No. | | decimal point | note | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
|-----|--------------------------|---------------|------|------------|----|------|------|-------|------|-----|-----|-----|---|
| 8 | Tassel: time of anthesis | day | 0 | | 51 | 55 | 59 | 63.25 | 68 | 73 | 78 | 83 | |
| | | | | Range | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ |
| | | | | width | 50 | 54 | 58 | 62.25 | 67 | 72 | 77 | 82 | ~ |
| | | | | median | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| | | | | Examp. var | | 52.5 | 56.5 | 60.6 | 65.1 | 70 | 75 | 80 | |

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|----|--|--|---|------------|------|------|------|-------|-------|-------|-------|-------|---|
| 15 | Tassel: number of primary lateral branches | | 2 | | 2.1 | 5.7 | 9.3 | 12.9 | 16.5 | 20.1 | 23.7 | 27.3 | |
| | | | | Range | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ |
| | | | | width | 2.09 | 5.69 | 9.29 | 12.89 | 16.49 | 20.09 | 23.69 | 27.29 | |
| | | | | median | | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | |
| | | | | Examp. var | | 3.9 | 7.5 | 11.1 | 14.7 | 18.3 | 21.9 | 25.5 | |

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|----|-----------------------------|-----|---|------------|----|------|------|-------|------|-----|-----|-----|---|
| 16 | Ear: time of silk emergence | day | 0 | | 54 | 58 | 62 | 66.25 | 71 | 76 | 81 | 86 | |
| | | | | Range | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ |
| | | | | width | 53 | 57 | 61 | 65.25 | 70 | 75 | 80 | 85 | ~ |
| | | | | median | | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | |
| | | | | Examp. var | | 55.5 | 59.5 | 63.6 | 68.1 | 73 | 78 | 83 | |

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|----|---|----|---|------------|-------|-------|-------|--------|-------|-------|-------|-------|---|
| 21 | Tassel: length of main axis above lowest lateral branch | cm | 2 | | 21.23 | 26.68 | 32.13 | 37.575 | 43.03 | 48.48 | 53.93 | 59.38 | |
| | | | | Range | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ |
| | | | | width | 21.22 | 26.67 | 32.12 | 37.565 | 43.02 | 48.47 | 53.92 | 59.37 | |
| | | | | median | | 5.45 | 5.45 | 5.45 | 5.45 | 5.45 | 5.45 | 5.45 | |
| | | | | Examp. var | | 24 | 29.4 | 34.8 | 40.3 | 45.8 | 51.2 | 56.7 | |

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|----|--|----|---|------------|-------|-------|-------|--------|-------|-------|-------|-------|---|
| 22 | Tassel: length of main axis above highest lateral branch | cm | 2 | | 13.68 | 17.83 | 21.98 | 26.125 | 30.28 | 34.43 | 38.58 | 42.73 | |
| | | | | Range | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ |
| | | | | width | 13.67 | 17.82 | 21.97 | 26.115 | 30.27 | 34.42 | 38.57 | 42.72 | |
| | | | | median | | 4.15 | 4.15 | 4.15 | 4.15 | 4.15 | 4.15 | 4.15 | |
| | | | | Examp. var | | 15.8 | 19.9 | 24 | 28.2 | 32.4 | 36.5 | 40.7 | |

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|----|----------------------------------|----|---|------------|-------|-------|-------|-------|-------|-------|-------|-------|---|
| 23 | Tassel: length of lateral branch | cm | 2 | | 11.6 | 14.6 | 17.6 | 20.6 | 23.6 | 26.6 | 29.6 | 32.6 | |
| | | | | Range | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ |
| | | | | width | 11.59 | 14.59 | 17.59 | 20.59 | 23.59 | 26.59 | 29.59 | 32.59 | |
| | | | | median | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | | | Examp. var | | 13.1 | 16.1 | 19.1 | 22.1 | 25.1 | 28.1 | 31.1 | |

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|----|--|----|---|------------|--------|--------|--------|--------|--------|--------|--------|--------|---|
| 24 | Only hybrids and open-pollinated varieties | cm | 2 | | 131 | 149 | 167 | 185 | 203 | 221 | 239 | 257 | |
| | | | | Range | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ |
| | | | | width | 130.99 | 148.99 | 166.99 | 184.99 | 202.99 | 220.99 | 238.99 | 256.99 | |
| | | | | median | | 18 | 18 | 18 | 18 | 18 | 18 | 18 | |
| | | | | Examp. var | | 140 | 158 | 176 | 194 | 212 | 230 | 248 | |

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|----|--|--|---|------------|------|---|------|------|------|------|------|------|---|
| 25 | Plant: ratio height of insertion of peduncle | | 2 | | | | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | |
| | | | | Range | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ |
| | | | | width | 0.09 | | 0.29 | 0.39 | 0.49 | 0.59 | 0.69 | 0.79 | |
| | | | | median | | | | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | |
| | | | | Examp. var | | | | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | |

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|------------|----------------------|----|---|--------|------|------|---------|--------|--------|-------|-------|-------|-------|---|---|
| 26 | Leaf: width of blade | cm | 2 | | | 5.33 | 6.48 | 7.63 | 8.775 | 9.93 | 11.08 | 12.23 | 13.38 | | |
| | | | | Range | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ |
| | | | | | 5.32 | 6.47 | 7.62 | 8.765 | 9.92 | 11.07 | 12.22 | 13.37 | | | |
| | | | | width | | 1.15 | 1.15 | 1.15 | 1.15 | 1.15 | 1.15 | 1.15 | | | |
| | | | | median | | 5.9 | 7.1 | 8.2 | 9.3 | 10.5 | 11.7 | 12.8 | | | |
| ata of exa | | | | | | | | | | | | | | | |
| Examp. var | | | | | | | TLP6868 | Wax 44 | NT6619 | | | | | | |

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|------------|------------------|----|---|--------|------|--------|----------|------|-------|-------|-------|-------|-------|---|
| 27 | Peduncle: length | cm | 2 | | | 2.05 | 4.55 | 7.05 | 9.55 | 12.05 | 14.55 | 17.05 | 19.55 | |
| | | | | Range | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ |
| | | | | | 2.04 | 4.54 | 7.04 | 9.54 | 12.04 | 14.54 | 17.04 | 19.54 | | |
| | | | | width | | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | | |
| | | | | median | | 3.3 | 5.8 | 8.3 | 10.8 | 13.3 | 15.8 | 18.3 | | |
| ata of exa | | | | | | | | | | | | | | |
| Examp. var | | | | | | Wax 44 | Tím VS10 | AG69 | | | | | | |

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|------------|-------------|----|---|--------|------|------|--------|----------|-------|-------|-------|-------|-------|--|
| 28 | Ear: length | cm | 2 | | | 5.25 | 8.35 | 11.45 | 14.55 | 17.65 | 20.75 | 23.85 | 26.95 | |
| | | | | Range | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | |
| | | | | | 5.24 | 8.34 | 11.44 | 14.54 | 17.64 | 20.74 | 23.84 | 26.94 | | |
| | | | | width | | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | | |
| | | | | median | | 6.8 | 9.9 | 13 | 16.1 | 19.2 | 22.3 | 25.4 | | |
| ata of exa | | | | | | | | | | | | | | |
| Examp. var | | | | | | | Wax 44 | Tím VS10 | AG69 | | | | | |

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|------------|---------------------------|----|---|--------|------|------|-------|-------|-------|------|------|------|------|--|
| 29 | Ear: diameter (in middle) | cm | 2 | | | 2.78 | 3.23 | 3.68 | 4.125 | 4.58 | 5.03 | 5.48 | 5.93 | |
| | | | | Range | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | |
| | | | | | 2.77 | 3.22 | 3.67 | 4.115 | 4.57 | 5.02 | 5.47 | 5.92 | | |
| | | | | width | | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | | |
| | | | | median | | 3 | 3.5 | 3.9 | 4.3 | 4.8 | 5.3 | 5.7 | | |
| ata of exa | | | | | | 3.9 | | 4.8 | | | | | | |
| Examp. var | | | | | | | CP989 | | HK4 | | | | | |

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|------------|------------------------------|--|---|--------|------|------|-------|-------|-------|-------|-------|-------|----|--|
| 31 | Ear: number of rows of grain | | 2 | | | 7 | 9 | 11 | 13 | 15 | 17 | 19 | 21 | |
| | | | | Range | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | |
| | | | | | 6.99 | 8.99 | 10.99 | 12.99 | 14.99 | 16.99 | 18.99 | 20.99 | | |
| | | | | width | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | | | | median | | 8 | 10 | 12 | 14 | 16 | 18 | 20 | | |
| ata of exa | | | | | | 11.6 | 14 | 15.8 | | | | | | |
| Examp. var | | | | | | | LVN45 | HK4 | AG69 | | | | | |

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|------------|--|----|---|--------|------|------|-------|----------|-------|-------|-------|-------|------|--|
| 34 | Only varieties with ear type of grain: sweet: Grain: | mm | 2 | | | 8.8 | 9.8 | 10.8 | 11.8 | 12.8 | 13.8 | 14.8 | 15.8 | |
| | | | | Range | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | |
| | | | | | 8.79 | 9.79 | 10.79 | 11.79 | 12.79 | 13.79 | 14.79 | 15.79 | | |
| | | | | width | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | | | median | | 9.3 | 10.3 | 11.3 | 12.3 | 13.3 | 14.3 | 15.3 | | |
| ata of exa | | | | | | | 12.3 | | | | | | | |
| Examp. var | | | | | | | | Sugar 75 | | | | | | |

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|------------|--|----|---|--------|------|------|------|----------|-------|-------|-------|-------|----|--|
| 35 | Only varieties with ear type of grain: sweet: Grain: width | mm | 2 | | | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
| | | | | Range | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | |
| | | | | | 6.99 | 7.99 | 8.99 | 9.99 | 10.99 | 11.99 | 12.99 | 13.99 | | |
| | | | | width | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | | | | median | | 7.5 | 8.5 | 9.5 | 10.5 | 11.5 | 12.5 | 13.5 | | |
| ata of exa | | | | | | | 10.5 | | | | | | | |
| Examp. var | | | | | | | | Sugar 75 | | | | | | |