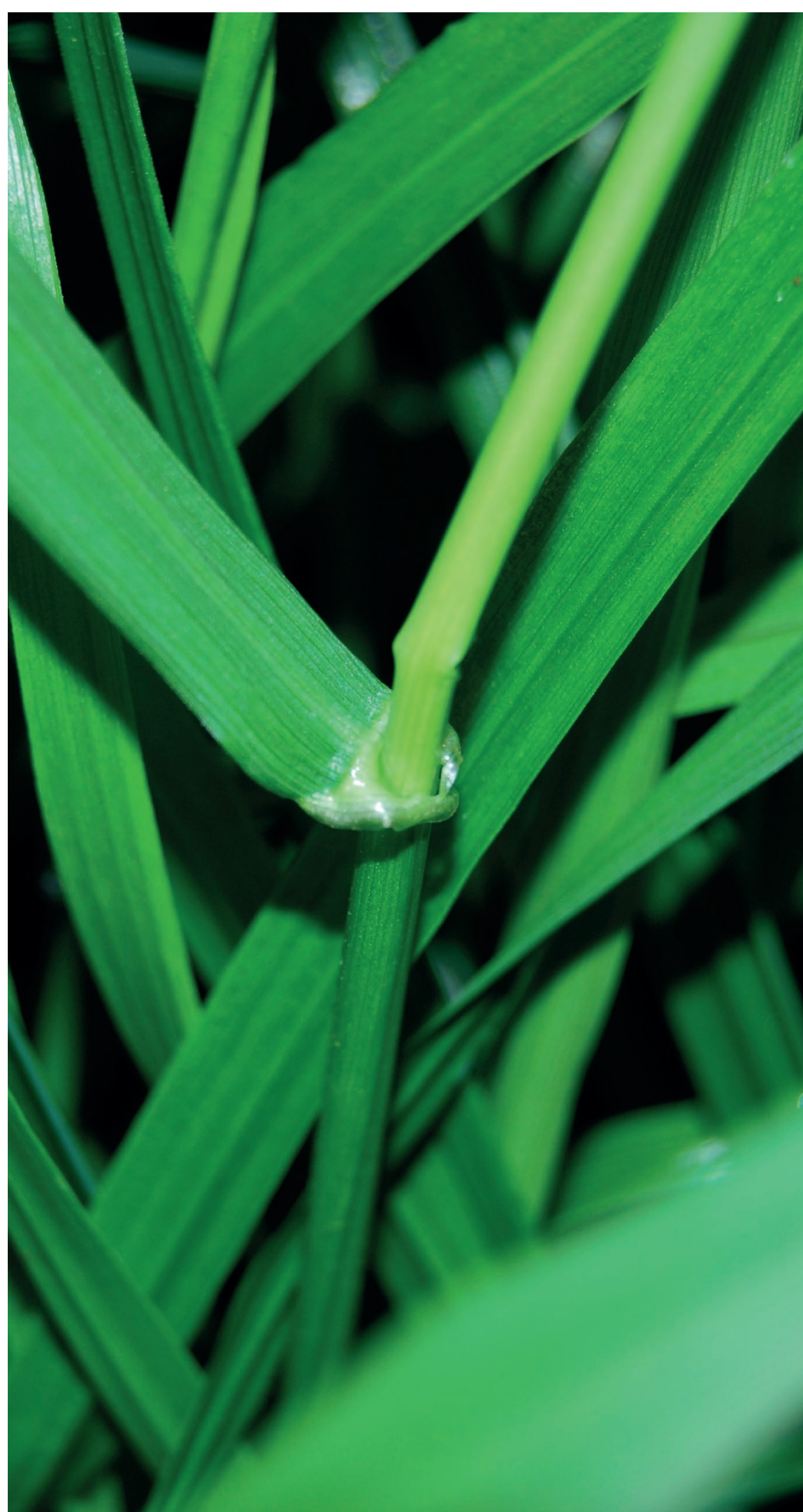


HERBAGE GRASS CROP IDENTIFICATION

All grasses within crop certification share similar characteristics. The expression of them varies between species. A key part of crop inspection is to verify if a variety matches the description given, and to clearly identify the varieties that do not match.

There are basic botanical structures that are shared by most grasses.

Auricles are the flanges of tissue that wrap around the emerging stem. They can be present, absent, hairy, or hairless and can be different sizes. A species will be uniform for its auricle type, but some hybrids can vary between varieties.



Auricle clasping the stem at base of leaf



Italian ryegrass auricles large and overlapping

As the grass grows a leaf blade will emerge from the stem. The ligule is the piece of tissue that is attached to the leaf blade and sits closely next to the stem. They are thought to be present to prevent water ingress into the growing point of the new stem. From an inspector's perspective, a ligule can be very useful with species identification; the Bayer Weed Guide has some useful images of species specific ligules.

There are nodes going up the stem; the presence or absence of them can help in a lesser extent to identify species.

The emerging leaf can be flattened or rolled in the sheath. This is another key character when it comes to species identification. Cocksfoot, for example, has a flattened stem with a folded emerging leaf. Italian ryegrass has emerging leaves that are rolled in the stem, whereas perennial ryegrass has emerging leaves folded in the stem. Red fescue leaves are rolled to form tight spike type leaves.



Italian ryegrass rolled leaf



Cocksfoot flattened stem

The seedheads in grass are another indicator of species; they can form a spikelet, panicle, or spike. Each is indicative of a particular grass species.

The darkness of green colour, width of leaf and anthocyanin pigmentation are not only key identifiers of species but can also be used to identify the different varieties.



Italian ryegrass

Perennial ryegrass glossy leaves

