HERBAGE LEGUMES, SUMMARY OF DETAILS OF VARIETAL IDENTIFICATION

While positive identification of herbage species is possible, it is challenging to identify individual varieties. However, trueness to type can be authenticated according to general conformity in overall habit to known characteristics.

CLOVER

Red Clover

The red clover varieties grown in England and Wales fall into two main groups:

Early Red Clover (traditionally known as Broad Red Clover)

These varieties are earlier in spring growth and earlier to flower than late red clovers. They normally produce two main cuts and a small autumn cut. The seed is taken from the second growth, usually in September and October. The second growth shoots from the crown of the plant and flowering stems have 5-7 internodes. Full flowering on the uncut growth takes place towards the end of June, and on the regrowth about 6-8 weeks after cutting. All varieties shown in the table below are in this group.

Late Red Clover (traditionally known as Late Flowering Red Clover)

This group of varieties flowers 14 days later than the early group of varieties and commences growth later in spring. They are more persistent than the early red clovers. The seed is taken from the first growth. If grazed the second growth shoots from the buds at the base of the stems of the first growth. Flowering stems would normally have ten or more internodes.

White Clover

Here leaf size and shape are a useful identification character. Inspectors need to become familiar with comparative leaf sizes of different varieties. Bear in mind that these are usually considerably larger than in the seed crops, but the relative sizes should still apply.

Time of inspection

For red clover inspect at full flowering, usually early to mid July for late varieties, and July to early August for broad red varieties. White clover, when stolons are actively growing and crop is approaching full flowering, usually between mid June and early July depending on grazing management.

LUPINS

Agricultural lupins are stout, erect plants, with palmate compound leaves, narrow stipules and large flowers. Lupin species are partially cross-pollinated between plants within each species. In white lupins, the pollen matures after flower opening, allowing a greater possibility of cross-pollination than in blue or yellow lupins where the pollen matures earlier (giving more self-pollination). Lupins, especially white lupins are attractive to bees, this normally results in about 40% cross-pollination in white lupin.

White Lupins (*L. albus)*

Are usually fairly tall plants with relatively large leaves, consisting of 5-9 broad leaflets.The flowers are larger than in blue and yellow lupins. Flower colour varies from white to blue or blackish blue, with a range of flowering dates. Anthocyanin stem pigment may be absent to strong. Most varieties are spring-sown.

Blue Lupins (*L. angustifolius).*

Plants are generally shorter than normal white lupins, with woody stems, small leaves, narrower leaflets and with blue, purplish, pink or white flowers. Most varieties are spring sown and do not survive normal winters.

Yellow Lupins (*Lupinus luteus).*

This species is usually the shortest in height, with medium sized leaves and width of leaflets. Flower colours are a range of yellows. Varieties are spring sown.

Crop Inspection of Lupins

cross-pollinate with each other.

Examples of off-types are:

* Different flower colour
* Indeterminate plants in determinate crop, and vice versa
* Stem anthocyanin colour present of absent
* Plant height differences

VETCHES

The two local vetches, English Early and English Late are morphologically similar, but may be distinguished under plot management by their time of flowering. Flowers are borne 1-3 in number in leaf axils. The keel petals are a darkish maroon-purple in contrast to the paler standard petal. The latter has a pale silvery-lavender zone near the leaf and on the reverse surface, giving the closed flower a silvery lavender appearance. Off-type flowers may be completely white or cream or a paler form of the true type. The stems and leaves of Common Vetch are only slightly hairy. Extensive hairiness is a character of Hairy Vetch and if present would be counted as an off - type.

Time of inspection

At the start of flowering. Usually mid June for autumn sown crops and late June to early July for spring sown crops.

Red Clover

VARIETY	PLOIDY	AVERAGE FLOWER COLOUR	AVERAGE FLOWER COLOUR SCORE	USUAL RANGE OF COLOUR GROUPS	% AVERAGE HAIRINESS
Early Red Clover					
Aberchianti	Dip	Intermediate	7		
Aberclaret	Dip	Dark	8		
Atlantis	Tet				v.low-low
Discovery	Dip				
Essex Broad Red	Dip	Light	5.5	3.5-9	25
Ganymed	Dip				v.low-low
Harmonie	Dip	Dark	8		
Lemmon	Dip				
Merviot	Dip	Intermediate	7	3.5-14	25
Milvus	Dip	Dark	8.6		11
Ostro	Tet				abs to very low
Trevvio	Dip				Low

White Clover

VARIETY	PLOIDY	TIME OF FLOWERING	STOLON THICKNESS	LEAF SIZE
Aberace	Tet	Medium	Thin	Small
Aberdai	Tet	Intermediate	Medium	Medium
Aberherald	Tet	Intermediate	Thick	Medium
Aberlasting	Tet	Late	Thin	Small
Aberpearl	Tet	Medium	Medium	Medium
Abersirius	Tet	Medium	Thick	Large
Aberswan	Tet	Early	Medium	Medium
Alice	Tet	Late	Medium Thick	Large
Crusader	Tet	Early	Medium	Medium Small
Riesling	Tet	Late	Medium Thick	Large

Lupin

VARIETY	LEAF COLOUR AT BUD STAGE	STEM ANTHOCYANIN AT BUD STAGE	PLANT HEIGHT AT START OF FLOWERING	PLANT HEIGHT AT "GREEN MATURITY"	TERMINAL LEAFLET LENGTH	TERMINAL LEAFLET WIDTH	FLOWER COLOUR	FLOWER COLOUR AT END OF KEEL	FLOWERING TIME
White Lupin									
Amiga	Medium green	Medium	Medium	Medium to tall	Medium	Medium	Blue-green	Blue-black	Early
Dieta	Medium to dark green	Medium to strong	Medium	Short	Medium	Medium	Bluish white	Blue-black	Very Early
Volos	Light to medium green	Strong	Medium to tall	Short	Long to very long	Broad	Bluish white	Bluish black	Very early to early

Lupin

VARIETY	LEAF COLOUR AT BUD STAGE	STEM ANTHOCYANIN AT BUD STAGE	PLANT HEIGHT AT START OF FLOWERING	PLANT HEIGHT AT "GREEN MATURITY"	TERMINAL LEAFLET LENGTH	TERMINAL LEAFLET WIDTH	FLOWER COLOUR	FLOWER COLOUR AT END OF KEEL	FLOWERING TIME
Blue Lupin									
Arabella	Medium to dark green	Absent or very weak	Short-Medium	Medium	Short	Narrow to medium	White	Yellow	Early to medium
Baron	Dark green	Medium	Short-Medium	Short-Medium	Very short to short	Narrow to medium	Blue	Blue-black	Medium
Boruta	Medium green	Very weak to weak	Medium	Medium	Medium	Medium to broad	Base violet shading to white	Yellow	Medium to late
Haags Blaue	Dar to very dark	Medium to strong	Short-Medium	Very short to short	-		Blue	Blue black	Early
Homer	Very light to light	Absent or very weak	Short	Very short to short	Short to medium	Medium	White	Yellow	Early
Prima	Medium green	Absent or very weak	Medium	Short	Long to very long	Medium to broad	Bluish white	Yellow	Early to medium
Primadonna	Medium	Very weak to weak	Medium	Short	Long	Broad to very broad	Violet	Yellow	Early
Regent	Medium green	Weak to medium	Short –medium	Medium	Short	Medium	Blue	Blue black	Early to medium
Sonet	Dark green	Strong to very strong	Medium	Very short to short	Medium	Medium	Blue	Blue black	Early to medium
Viol *	Dark green	Medium to strong	Short-Medium	Medium	-	Medium to broad	Violet	Yellow	Late
Iris	Medium	Weak	Medium	Medium	Short	Medium	White	Yellow	Early

Lupin

VARIETY	LEAF COLOUR AT BUD STAGE	STEM ANTHOCYANIN AT BUD STAGE	PLANT HEIGHT AT START OF FLOWERING	PLANT HEIGHT AT "GREEN MATURITY"	TERMINAL LEAFLET LENGTH	TERMINAL LEAFLET WIDTH	FLOWER COLOUR	FLOWER COLOUR AT END OF KEEL	FLOWERING TIME
Yellow Lupin									
Bornal	Medium to dark green	Weak	Medium to tall	Medium to tall	Medium	Narrow to medium	Yellow	Blue black	Medium to early

* = Determinate growth habit

Vetch

Common Vetch

VARIETY	SEASONAL TYPE	LEAF COLOUR	SHAPE OF LEAFLET TIP	SHAPE OF LEAFLETS	COLOUR OF STANDARD PETAL	SEED SIZE	SEED SHAPE	SEED COAT
Amethyste	Spring	Mid green	Square	Medium	Medium Violet	Large	Round	Grey brown, brown and black marbling
Argon	No Data	Light	Straight	Medium	Medium Violet	Small	Slightly irregular	Brown
Barvicos	Spring	Mid green	Square	Narrow	Medium Violet	Medium	Globose	Grey-brown
English Early	Winter	Dark green	Concaved	Broad	Lilac purple	Medium large	Semi round	Grey brown, brown and black marbling
Lolita	Spring	Dark green	Concaved	Broad	Deep violet	Medium	Oval	Green to grey base with brown and black blotches
Nacre	Spring	Mid green		Medium	Mid violet	Medium	Globose	Grey-green
Neon	Spring	Medium	Straight	Medium	Light Violet	Medium	irregular	Greyish brown
Slovena	Spring	Mid green	Straight to concaved	Medium	Bright violet	Medium	Round	Brown with strong blue-black marbling
Topaze	Spring	Mid green	Straight	Medium	Mid violet	Medium	Globose	Grey brown with brown marbling

Hairy Vetch

VARIETY	TIME OF FLOWERING	LEAF COLOUR	LEAFLET LENGTH	PLANT LENGTH	COLOUR OF STANDARD PETAL	SEED SIZE	SEED SHAPE	SEED COAT
Ostsaat - Dr. Baumanns	Medium		Medium to long	Long	Violet	Medium		

Lucerne

VARIETY	TIME OF FLOWERING	NATURAL HEIGHT IN SPRING	FREQUENCY OF PLANTS WITH VERY DARK BLUE VIOLET FLOWERS	FREQUENCY OF PLANTS WITH VARIGATED FLOWERS	FREQUENCY OF PLANTS WITH CREAM WHITE OR YELLOW FLOWERS
Artemis	Very early to early	Medium to tall	Absent or very low to low	Absent or very low	Absent of very low