

Phenological Observation Guide for GPM-Stations

Definitions of phases

1. SL = Sprouting of leaves

BBCH 07 (bud break)

BBCH 53 (bud burst)

The buds begin to open in at least 3 places on the object under observation. In the case of flower buds (bud burst) the green leaf tips enclosing flowers are visible; in the case of leaf buds (bud break) the first green is visible.

2. UL = Beginning of the unfolding of the leaves, first leaf surfaces visible

BBCH 11

In at least 3 places on the object under observation, first leaves have pushed themselves completely out of the bud or leaf sheath and have unfolded completely, so that the leaf stalk or leaf base is visible. This phase is sometimes only recognizable by bending back the young leaf. The individual leaf has taken on its ultimate form, but has not yet reached its ultimate size.

3. BF = First flowers open, Beginning of flowering, blossom

BBCH 60

In at least 3 places on the object under observation the first flowers have opened completely.

Exceptions:

Snowdrops (*Galanthus nivalis*): the first 3 flowers have opened at the plantation. The flower is considered open only when the outer leaves have spread and the stamens are visible.

Heather (*Calluna vulgaris*): on 3 places of the plantation the first flowers have opened completely.

4. FF = Full flowering / General flowering / Full blossom

BBCH 65

Approximately 50% of the flowers are open.

5. EF = End of flowering, blossom

BBCH 69

This phase occurs when the flowers have faded. In some existing networks “flowers have faded” is equated with “approximately 95 % of the total petals have fallen”. This rule is some different in formulation to the BBCH69 definition but in practice “de facto” identical.

6. RP = Fruit ripe for picking (for apple, pear, sweet cherry, morello, red currant)

BBCH 87

The fruits show the colouring characteristic for their variety and can be removed easily from the fruiting lateral.

Exception:

Premature ripening should not be reported.

7. RP = First ripe fruits (for almond, European chestnut)

BBCH 86^{*1}

The first ripe fruits fall from the tree naturally.

Exception:

Premature ripening should not be reported.

8. CL = Colouring of leaves

BBCH94^{*1}

Approximately 50 % of the leaves have taken on the colors of autumn. Colouring of leaves, caused by drought, should not be reported.

9. FL = Leaf fall

BBCH95

Approximately 50 % of the leaves have fallen off. Falling of leaves, caused by drought, should not be reported.

^{*1} The reference numbers BBCH86 and BBCH94 were defined for this purpose. They fit into the context and do not violate the BBCH principle.