

DAILY BREAD

“Grain of Hope : Slice of Heaven”

Flowering



Photo credit: Tico on Flickr

Flowering Wheat

Flowers? I can't be the only one to be surprised. That word summons scents, a summer-shout of colours, spilling-out of petals. Not this ordinary green

camouflaged against the leaf blade, dulling to straw tone; not this hard-to-see protruding of frail filaments on which are stuck minuscule pollen-sacs. Yet it is not

the bee-murmuring lavender, or the poppy screaming loud red, or the majestic rose that has domesticated us, even as we tamed and toiled to enclose it. We might not see

these wheat florets (at last a flowery word) with their unassuming shape, drab servant-hue. Yet they will fatten, multiply their ears; that milky core will harden into grain.

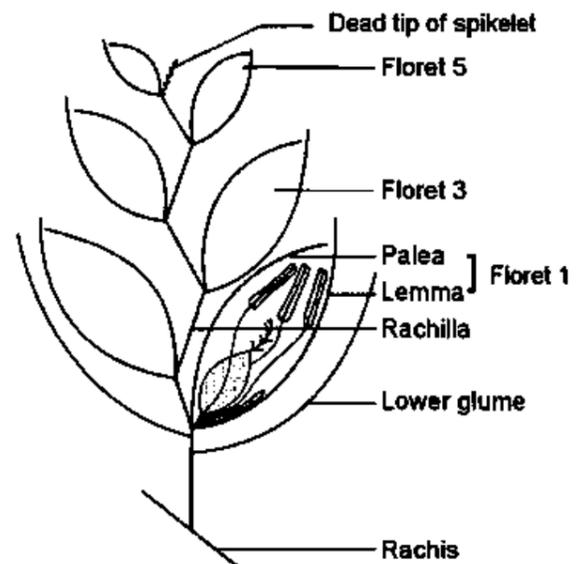
Diane Pacitti, 2020

Left. Photograph of a wheat flower showing the yellow pollen-bearing anthers and fluffy white stigmas. These are normally hidden away in the spikelets.

Flowering generally happens once the head (ear) has emerged from its sheath, but may well start earlier. The ear consists of a series of spikelets, on alternating sides of the rachis to which they are attached, each looking like a little 'High Five'.

Firm attachment to the rachis has been selected by farmers and breeders for millennia – it's much easier to harvest the grains if they stick together in one ear. This characteristic is a disaster in the wild: seeds that stay stuck together can't disperse and grow new plants. Hence modern wheat is entirely dependent on humans for its survival.

Each spikelet contains up to 8 florets with all the female and male apparatus needed to make a seed, so one ear of wheat can potentially produce over 100 seeds. Wheat is self-pollinating - pollen can be produced by anthers, deposited on the stigma, and burrow into the ovary to fertilise an egg, all hidden away inside the spikelet. Sometimes the yellow anthers can be seen dangling outside the spikelet on the ends of long filaments. Generally if they're yellow and visible, then flowering is all over.



Left. Photograph taken by Deborah of a spikelet which is made up of 6 -8 florets.

Above. Diagram showing the parts of spikelet showing 5 Florets attached to the rachis, which acts as a sort of backbone of the wheat ear.



St James's Church
197 Piccadilly
London
W1J 9LL

