

BOTANICAL WORDS

Seeds and Belly Buttons by Patricia Stooke

funiculus

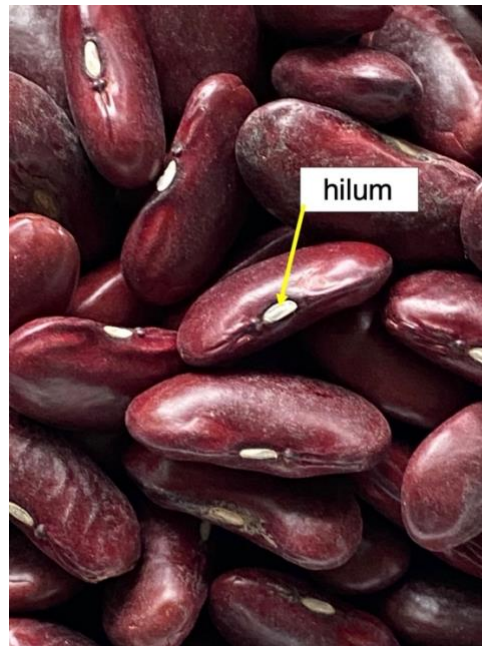
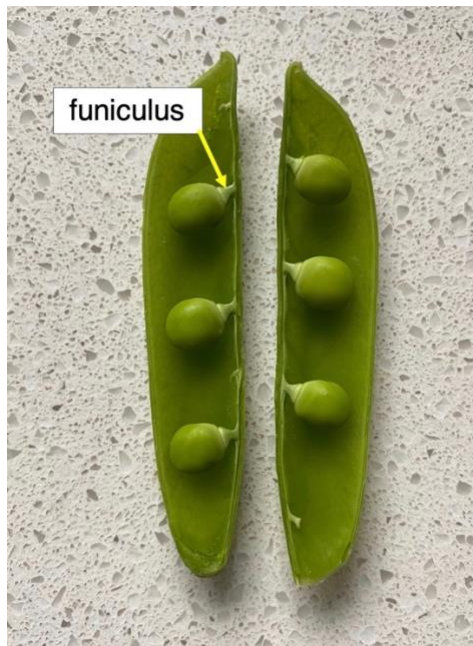
'slender rope' or 'stalk'
(pronounced: few-NICK-you-luss)

hilum

'mark or scar'
(pronounced: HIGH-lum)

Funiculus, besides being a really fun word to say, means 'slender rope' or 'stalk'. In plants, the funiculus is the stalk that attaches an ovule to the ovary. It acts as an anchor for the ovule, and serves as a vascular conduit between the ovule and the ovary of the mother plant. Substances flow to and from the mother plant to the fertilized ovule through the funiculus, as the ovule develops into a mature seed. A human analogy of the funiculus would be the umbilical cord of a developing fetus, attached to its mother.

When the seed is mature and separates from the fruit (mature ovary) of the mother plant, the seed's connection with the funiculus is broken. Where the funiculus was once attached, a mark or scar can be seen on the seed. This scar is the **hilum**, which may easily be seen with the naked eye on larger seeds, such as beans or peas. To continue the analogy, when a baby is born, the umbilical cord detaches and leaves a mark where it was once connected - the belly button. In other words, the hilum is the 'belly button' of the seed!



Left: The **funiculus** is visible as the small stalk attaching a developing pea (*Pisum sativum* L.) seed to its pod; **Right:** The white mark or scar (or 'eye') on this bean (*Phaseolus vulgaris* L.) seed is the **hilum**.
Images by P. Stooke.