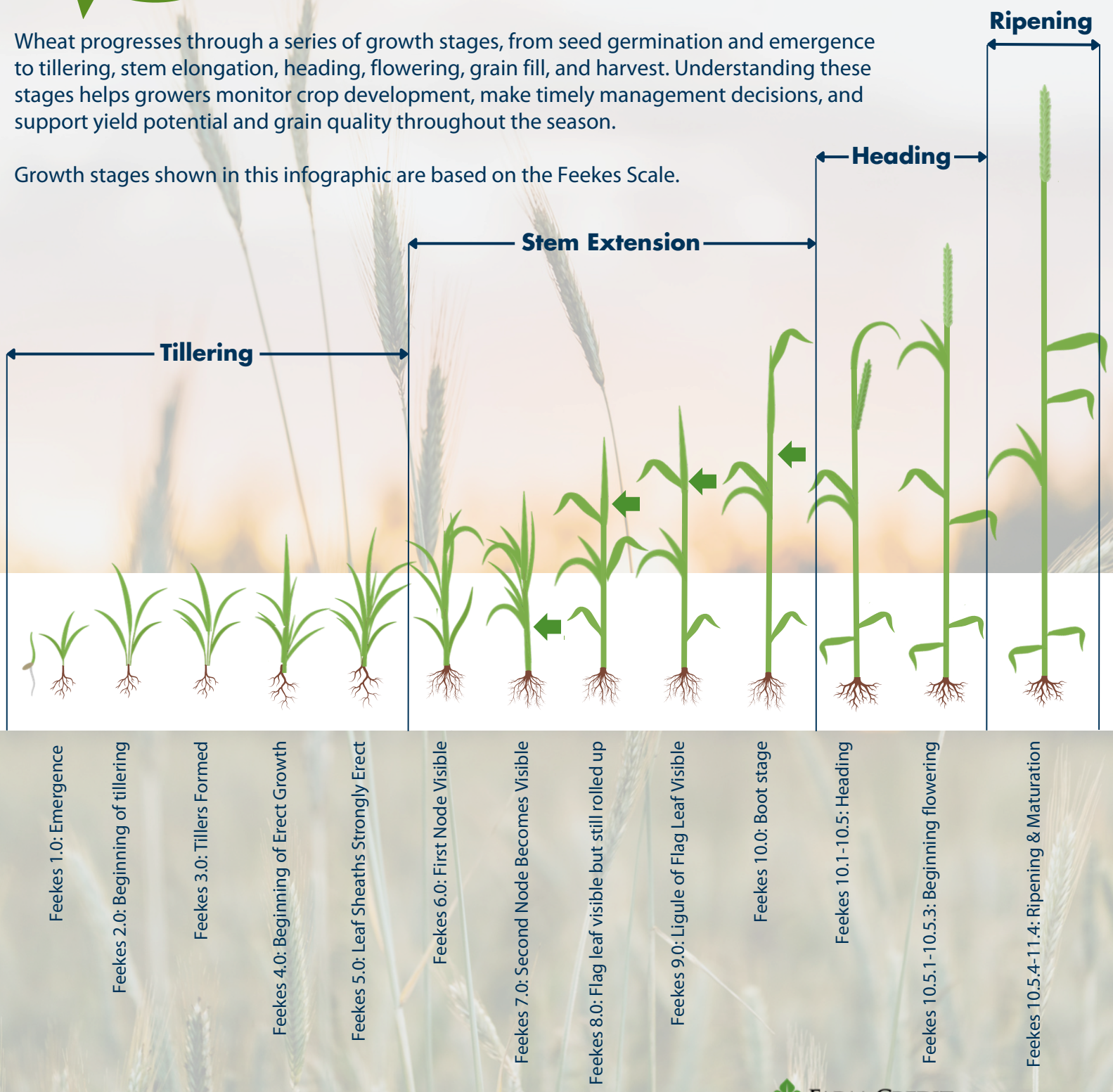




WHEAT

Wheat progresses through a series of growth stages, from seed germination and emergence to tillering, stem elongation, heading, flowering, grain fill, and harvest. Understanding these stages helps growers monitor crop development, make timely management decisions, and support yield potential and grain quality throughout the season.

Growth stages shown in this infographic are based on the Feekes Scale.



TERMINOLOGY

Seed & Germination Stage

Seed – Contains a young plant (embryo) and stored nutrients needed for germination.

Germination – The process by which a seed absorbs water and begins to grow.

Emergence – When the first shoot breaks through the soil surface.

Seedling – A young wheat plant in its earliest stage of growth.

Vegetative Growth Stage

Crown – The area at the base of the wheat plant where new roots and tillers develop.

Tiller – A secondary stem that grows from the base of the wheat plant and may produce a grain head.

Tillering – The stage when the plant produces additional stems, called tillers, which can develop grain heads.

Photosynthesis – The process by which plants use sunlight, water, and carbon dioxide to produce energy and support growth.

Stem Elongation – The growth stage when the stem rapidly increases in height.

Node – A joint on the stem where leaves are attached.

Flag Leaf – The last leaf produced before the wheat head emerges. It provides much of the energy needed for grain development.

Reproductive Growth Stage

Boot Stage – The growth stage when the developing wheat head is enclosed within the stem sheath.

Head (Spike) – The flowering part of the wheat plant that contains the developing kernels.

Heading – The stage when the wheat head emerges from the boot.

Flowering (Anthesis) – The reproductive stage when pollination occurs and kernels begin to form.

Pollination – The transfer of pollen needed for seed development.

Grain Development & Maturity Stage

Kernel – An individual wheat grain.

Grain Fill – The period when starch and nutrients accumulate in developing kernels.

Physiological Maturity – The stage when kernels have reached their maximum dry weight and grain development is complete.

Harvest – The process of gathering mature wheat grain from the field.

General Plant Term

Annual Crop – A plant that completes its entire life cycle, from seed to seed production, within one growing season.

Sources

<https://stepupsoy.osu.edu/wheat-production/wheat-growth-stages-and-associated-management>

<https://agcrops.osu.edu/newsletter/corn-newsletter/what-meaning-feekees-growth-stages-wheat>

