 **Hue (H)** represents the color itself, independent of brightness. It defines the type of color (e.g., red, green, blue) and is represented as an angle around a color wheel (0 to 360 degrees).

 **Saturation (S)** indicates the intensity or purity of the color. High saturation means vivid colors, while low saturation appears washed out or grayish, but it still does not depend on brightness.

 **Value (V)** represents the brightness or luminous intensity of the color. By isolating this component, you can adjust or eliminate luminance without affecting the hue and saturation.

Since **Value (V)** in HSV is the only component directly tied to brightness, you can easily "eliminate" luminance by adjusting or disregarding this channel while retaining the **Hue (H)** and **Saturation (S)** channels. This separation is especially useful in image processing tasks, such as color-based object detection, where you want to work with color information alone without the impact of lighting conditions.

50 epochs epoch 40th decrease the lr

Training Accuracy: 97%

Val Accuracy: 93%

Green 104 \* 3 -> 416

Yellowish 57 \*6 -> 399

Mid ripen 97 \*5-> 388

Overripen 42\*8 -> 378