RGB imagery is named that because one band (or band product) is assigned to the red component, a second band (or product) is assigned to the green component, and a third to the blue component.

Do this with images first. Go to the website: http://cimss.ssec.wisc.edu/goes/webapps/satrgb/satrgb_flower1.html -- and you'll see a beautiful yellow flower surrounded by green leaves on top of reddish mulch.

Under 'Select Red', choose 'Red Band'; under 'Select Green' choose 'Green Band' and under 'Select Blue' choose 'Blue Band'. Click 'Combine Channels. What do you see? It should be the same picture. (Why?)

Now, choose 'Red Band' for all three, and click 'Combine Channels'. What do you see?

Make the 'Red' component the Green band and the 'Green' component the Red band. Does the mulch change color after you hit 'Combine Channels'?

Click 'Green Band' for all three and then Combine Channels. Do you get the same image?

Click 'Blue Band' for all three and then Combine Channels. Do you get the same image?

Why might the three channels be different?

What does changing the Scale Factor do?