

Choosing Shade Cloth Color and Ground Cover Color

When shade cloth is white it reflects light and the related heat.

When shade cloth is black it absorbs all colors of light and then releases the energy as heat.



White fabric reflects light and is therefore generally cooler than black. Also, because it reflects light from all directions, a white fabric, equal in construction to black fabric, will not provide the same amount of shade.

For white shade to block the same amount of light as black it needs a tighter, or heavier, construction.

Color Fabric	Black	White	White
"Shade Factor"	70%	57%	69%
Weight	6.6 oz/yd ²	6.6 oz/yd ²	8.2 oz/yd ²
Impact of color on light energy	Absorbed	Reflected in all directions	

Want light all over a plant; below, on top, and sides?

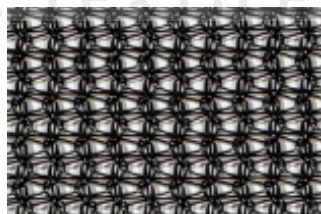
White is great. White ground cover gets light to the underside of crops and white shade can reflect light to strike different angles.

Is fabric weight a concern?

To achieve the same shade factor with white as black, the white requires more yarn. From above chart, 70% white shade is almost 2 ounces/ yd² heavier than the black



White Shade



Black Shade

Reference articles are:

<https://sciencing.com/colors-absorb-heat-8456008.html>

<http://scienceline.ucsb.edu/getkey.php?key=6157>

<https://www.wired.com/story/should-you-wear-white-or-black-on-hot-days-heres-the-data/>