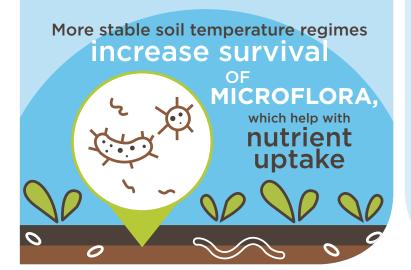


# Soil FACTS:

In the soil in no-till systems
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**Micro-organisms will slow down** when it is too hot (above 35°C or 95°F).

Less temperature variability Increases bacteria & fungi in the soil.



# Skin FACTS:

Skin cancer is the most common cancer, with OVER 20% of people developing skin cancer during their lifetime.

MELANOMA is the most dangerous skin cancer and is much more prevalent in men over the age of 50.

Melanoma rates in the United States **doubled** from 1982 to 2011 and have **continued to increase.** 

It is estimated that melanoma will affect 1 in 27 men & 1 in 40 women in their lifetime.

# Soil FACTS:

RESIDUE ON THE SOIL SURFACE improves Water capture significantly, and reduces loss to evaporation.

**Ultraviolet light can damage DNA** which induces mutations in the soil organisms resulting in the death of the organism or biochemical changes, for example changes of enzymes and metabolic pathways. <sup>++</sup>

#### Extreme heat stress

can reduce plant photosynthetic and transpiration efficiencies and negatively impact plant root development, which collectively can **negatively impact yield.**<sup>†</sup>

**Photochemical degradation** will lead to structural changes to organic molecules making them more or less easy to be degraded. <sup>††</sup>

Some bare soils can reach **140 DEGREES,** hot enough to kill soil organisms & stress the crop from both heat & excessive soil moisture evaporation:



# Skin FACTS:

HIGHER MELANOMA rates among MEN may be due in part

ower

rates of

SUN

PROTECTION

Studies have shown that every inch of brim REDUCES the risk of skin cancer over a lifetime by 10%



#### SOUTH DAKOTA SOIL HEALTH COALITION 116 N. Euclid Ave. Pierre, SD, 57501 sdsoilhealth@gmail.com | www.sdsoilhealthcoalition.org (605) 280-4190

This material is based upon work supported by the Natural Resources Conservation Service, U.S. Department of Agriculture, under agreement 68-6740-17-010.

\* www.farmprogress.com/cotton/daily-temperature-range-factor-soil-health

<sup>†</sup> cropwatch.unl.edu/2016/impacts-extreme-heat-stress-and-increased-soil-temperature-plant-growth-and-development

<sup>++</sup>Food and Agriculture Organization of the United Nations

\*\* www.sare.org/Learning-Center/Topic-Rooms/Cover-Crops/Ecosystem-Services-from-Cover-Crops/10-Ways-Cover-Crops-Enhance-Soil-Health

### MELANOMA is the most dangerous skin cancer and is much

more prevalent in **men over the age of 50.** 



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#### HIGHER MELANOMA rates among Men may be due in part

lower

rates of

SUN

**PROTECTION.** 

brought to you by:



#### Studies have shown that every inch of brim REDUCES the risk of skin cancer over a lifetime by

So if you consistently wear a 4 inch brimmed hat, you reduce your LIFETIME RISK of skin cancer by 40%

South Dakota

Soil Health Coalition

brought to you by:

Avera

## RESIDUE

#### left on the soil in no-till systems reduces soil temperature fluctuations and supports soil health.

brought to you by:



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#### More stable soil temperature regimes increase survival

OF

which help with nutrient uptake

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MICROFLORA,

brought to you by:

**Avera** 

RESIDUE ON THE SOIL SURFACE improves Water Capture significantly, and reduces loss to evaporation.

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Some bare soils can reach **140 DEGREES,** hot enough to kill soil organisms & stress the crop from both heat & excessive soil moisture evaporation.

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