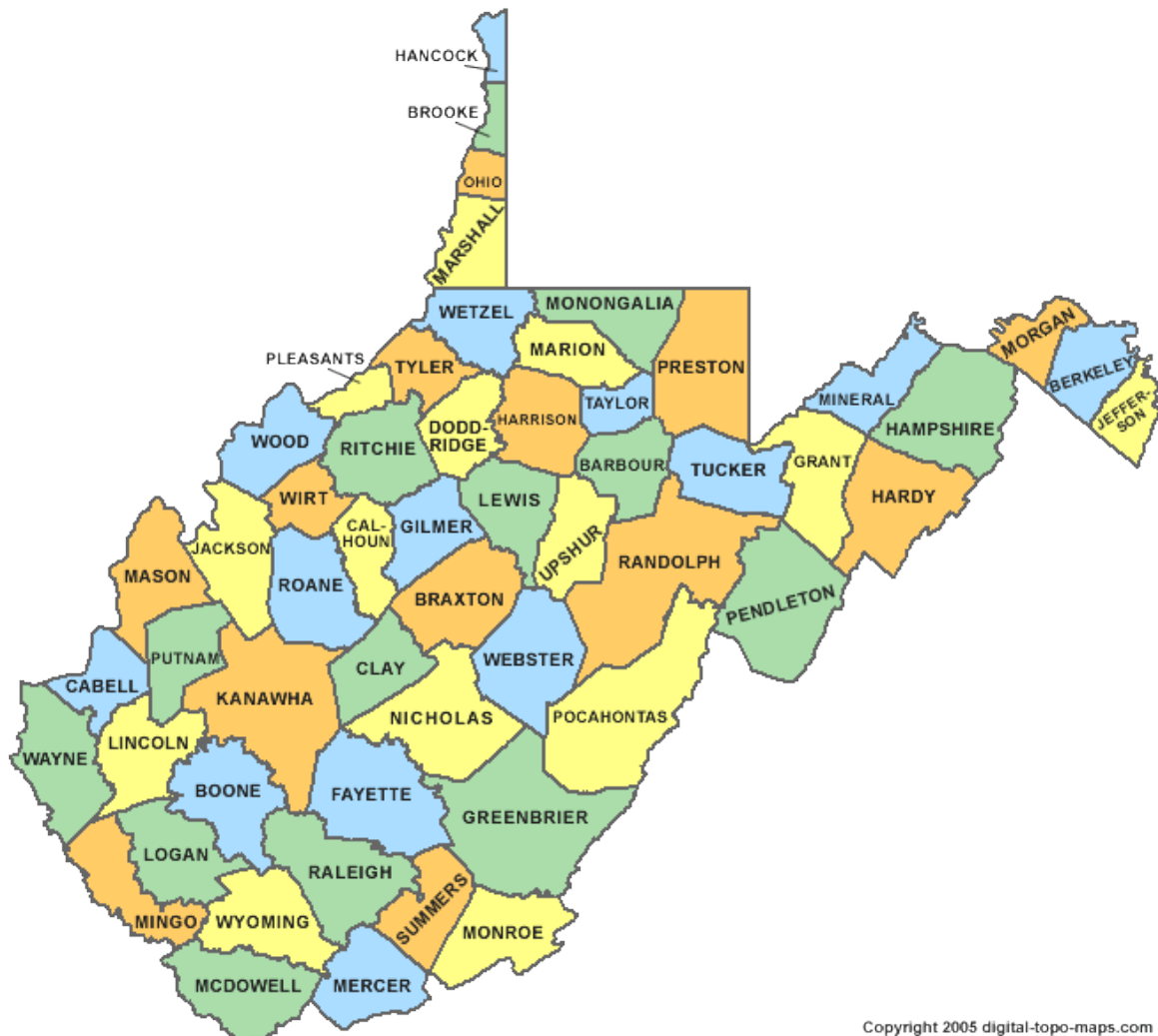


Multimin PUTS MICRO MINERALS ON THE MAP!

WEST VIRGINIA – Micro Minerals (Cu, Mn, Zn, Se) in Cattle:

Pasture quality studies in West Virginia indicated that pastures were deficient in Zn in 50% of pasture samples analyzed. Pastures sampled in August and September of those years was higher in Zn than average. The Cu content of pasture forage was below the 10 ppm recommended for beef cattle in about 40% of pastures. The pasture content of Mn was sufficient in more than 95% of pastures tested. Pasture samples were not tested for Se, but supplementation of Se is recommended in West Virginia, because a deficiency in Se is most likely to occur when forage is grown on acidic soils typical to West Virginia.



Cattle with trace mineral deficiencies often show no clinical signs until they are severely deficient, but a chronic deficiency inhibits performance and decrease production.

Clinical signs of copper deficiency include:

- Immune suppression – disease breakouts and failure to respond to vaccination
- Rough, red dull hair coat
- Anemia

Clinical signs of selenium deficiency include:

- Muscle degeneration (white muscle disease)
- Reproductive failure
- Immune suppression

Clinical signs of manganese deficiency include:

- Bone abnormalities
- Reduced growth rate
- Reduced fertility

Clinical signs of zinc deficiency include:

- Compromised hoof integrity
- Bull reproductive failure
- Anorexia and weight loss esp. in calves

Where does Multimin fit in?

- Multimin provides zinc, manganese, copper and selenium in a readily available form as an injection.
- Multimin rapidly increases trace mineral status of animals.
- Multimin rapidly increases liver storage of trace minerals following injection.
- Multimin bypasses antagonists in feed, forage, distillers grain and drinking water that can reduce the absorption of these critical trace minerals.

Reference :

Extension Service of University of West Virginia. Pasture forage quality in West Virginia

