

Late N Fertilization in Corn

2019 was a memorable year in a number of ways –and one that many would like to forget. Even in these types of years, there’s always some-thing to glean from the challenges. This year, we got to learn a little about nitrogen management in corn. Do we top-dress or not? Is this something we should consider every year or will 2020 be back to ‘normal’? How late in the season can we apply nitrogen and still get a response? Recent studies have fine-tuned our knowledge about N management in corn. We know that current hybrids accumulate 35-40% of their total N uptake after silking. If estimates of farmer practices suggesting that only 25% of our total nitrogen load is applied after planting are correct, most of our N is on for a significant part of the growing season, leading to potential concerns for N loss due to leaching, denitrification, and volatilization. As we continue to try and better match N supply with crop needs, a recent three-year KSU study looked at the effect of late season nitrogen fertiliza-tion on both grain filling and yield. Their findings showed that there were no significant yield effects found between N applied at silking and N applied two weeks after R1 (2017 data). What’s that mean? Our window of nitrogen application in corn, particular-ly for rescue treatments when N may have been lost through the growing season, may be longer than first thought. To check out the entire study, check out Issue 6 of Kansas Field Research available online at:

<https://newprairiepress.org/cgi/viewcontent.cgi?article=7776&context=kaesrr>