

## Flood Tolerant Soybean Varieties for North Carolina

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Soybean varieties in N.C. do not tolerate wet feet, or more precisely, wet roots very well. When farmers experience excessively wet springs and summers, especially in the eastern and northeastern part of the state, chronic wet roots cause slow grow-off, poor leaf color and spindly plants. Getting yields greater than 45 bu/A under those conditions is a challenge, even when all other production aspects are perfect. New discoveries in Arkansas and Missouri, where flooding and wet feet are even more common than in N.C., give hope this problem can be overcome. Some soybean varieties have been shown to handle extra water much better than others. New mid-South varieties in development appear to be even better than existing stocks.

The big question for N.C. farmers is, will the Mid-South technology show a payoff in N.C. The NCSPA, along with the USDA-ARS and N.C. State, are funding a graduate student to explore the potential of new flood tolerance technology. This summer, a hybridization program was initiated to develop flood-tolerant soybeans adapted to N.C. and the Tidewater area. NC-Dunphy is a high yielding group VI that also appears to have some tolerance for flooding. Four of the better flood-tolerant candidates were crossed to NC-Dunphy and the progeny from these crosses will be evaluated in 2019 and beyond.

