

National Agricultural Technology Center strengthen field management in China

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High temperatures and droughts have occurred in North and Southwest China since the spring sowing, causing local rainstorms and floods, and some soybeans were sown at a high density, leading to weak growth and soft stems, as well as late defertilization, lodging, and reduced yields. National Agricultural Technology Extension Service Center, in collaboration with the Ministry of Agriculture and Rural Affairs' Scientific Fertilization Expert Guidance Group, developed technical guidance on soybean management to promote strong plants, strong populations, and drum granules in order to strengthen field management and disaster prevention and mitigation.

1. Top dressing to promote strong plants: For fields with weak growth and soft stems, appropriate amount of nitrogen and phosphorus fertilizers and potassium fertilizers should be added to supplement medium and trace elements to promote the growth of soybeans and enhance the strength of stems. Combined with cultivating for topdressing, apply 3-4 kg of diammonium phosphate, 1-2 kg of potassium sulfate or 2-3 kg of high-potassium compound fertilizer per mu. It can also be sprayed with 1% potassium dihydrogen phosphate solution and water-soluble fertilizer with medium and trace elements 1-2 times.

2. Strong control groups: Due to late sowing or variety reasons, some fields have just entered the initial flowering stage, and they are prone to flourishing when encountering high temperature and precipitation, so chemical control should be taken in time. Spray 10-20g of 5% uniconazole wettable powder per mu, and drones can be used to spray to control plant height, build strong colonies, and prevent later lodging.

3. Drainage and anti-lodging: It is currently the rainy season, and for fields that are prone to waterlogging, measures such as ditching and mechanical drainage must be taken in time to remove field water and stagnant water in the plow layer. After drainage, 0.5%-1% urea solution and 0.2% potassium dihydrogen phosphate solution can be sprayed on the leaves to promote the recovery of roots and plants. For soybean-corn strip compound planting, after the root system recovers, topdress fertilizer in time to increase nutrient supply. Slightly lodging plants can be lifted up manually, two rows are supported, and soil is fertilized. It is not advisable to manually lift up the plant when it is seriously lodging, so as not to break the plant.

4. Fertilizer spraying and drumming pellets: The peak period of fertilization is from flowering and pod formation to bulging grains. If there is defertilization, nitrogen, phosphorus, potassium, boron, molybdenum and other nutrients can be supplemented by foliar spraying to reduce grains, increase grain weight, and increase yield. For fields with weak plants, it is recommended to spray 0.1%-0.3% potassium dihydrogen phosphate solution, and apply boron fertilizer 120-125g/mu. Spray foliar fertilizers containing amino acids, molybdenum fertilizers can also be sprayed to supplement nutrients and promote plant growth.