



Team Zoysia™

ESTABLISHING FOUNDATION AND REGISTERED PLANTING STOCK FIELDS OF ZOYSIAGRASS

All vegetative zoysiagrasses require that all classes of sod sold be in a recognized seed/sod certification program. Unlike many of the vegetatively produced bermudagrasses, the zoysiagrasses are fertile and fully capable of producing viable seed. In maintaining planting stock fields, especially of Foundation and Registered class of sod, it is important to monitor and frequently eradicate any seed heads forming. Our research indicates that viable seed can be produced within 21 days of head emergence and therefore we recommend the frequency of cut be 1 to 2 times per week during seed head formation period. Certified sod fields harvested as sod are less vulnerable to seedling contamination when harvested as sod or as plugs. Certified production which is dug as sprigs should also be treated according to the following recommendation.

Many of the zoysiagrasses will produce seed heads below the frequent height of cut and therefore can produce seed on these lower seed heads. Mechanical removal is therefore not the only precaution that we must take in maintaining these fields.

One major biological advantage we have in field maintenance is the post harvest dormancy of Zoysiagrass seed. Briefly put, the seeds do not germinate easily and may require several days – weeks of exposure to light, frequent moisture and drying-wetting cycles prior to germination. Please note, however, that the seed is viable and will eventually germinate. Therefore it is recommended that when establishing from sprigs or plugs as done with expansion of planting stock the following is recommended.

- 1) Seeds heads must be removed to prevent seed formation. Viable seed can be produced on a seed head within 21 days of emergence. Recommend using reel and rotary mowers. The use of groomers with reel mowers will be more effective in seed head removal. However, for large scale production fields it may be impractical.
- 2) Within 45 days of digging of sprigs or cutting sod, use pre-emergence herbicides (triazines have been effective for us) to treat the harvested area to prevent germination of any seeds which may have developed and dropped to the ground. Exposing the soil surface to light aids in stimulating seeds to germinate. The triazine (simazine or atrazine) herbicides appear to be effective when applied within 2 weeks of harvest. Other herbicides may be effective as well. More research must be conducted to determine which is the most effective for seeding control with minimal impact on the stolons and rhizomes of the desirable plant. Other consultants and program will recommend the use of Ronstar or other pre-emergent herbicides none of which I have found will control seedling zoysiagrass even though other weeds are effectively managed. The concern with this recommendation has to do with controlling and eradicating the possibility of

viable zoysiagrass seed germinating and establishing in an otherwise genetically stable production field. If seedlings become established, the seedlings will result in a genetic shift and loss of genetic integrity of the variety.

- 3) When fields are established vegetatively it is now recommended that a preemergence herbicide be applied approximately 4-6 weeks after planting. This should be sufficient time for the sprig to root and begin growth and development. Any seeds which may be present will require up to 6 - 7 weeks to germinate and should be controlled by the presence of the pre-emergence herbicide. Again, the use of triazine herbicides is in order and although some reduction in establishment may occur, the alternative is unacceptable. Research continues to further define which class of herbicides will be most effective. Presently only the triazines previously mentioned are recommended at the minimal label rate. Since most of these herbicides will have 90 – 120 days protection activity, a single application should be sufficient to provide control of seedling establishment. If full coverage is not attained within this time period a second application may be necessary.