So the real secret to communication is not how much we know, but how much do we care and how interested and sincere are we with our club members, employees, and fellow superintendents. To communicate is to talk I know, but to make it work, someone has to listen.

How well are you and I communicating. Ed Wollenberg, President

From "The Agronomist" U. of Md. FERTILIZER-PESTICIDE COMBINATIONS? A. J. Powell, Turf Specialist

When purchasing fertilizer combinations with insecticides, fungicides and herbicides, there are several questions to be answered to determine if the purchase is feasible. If there is any reason to doubt the necessity of either component of a combination, buy the straight materials. Timing of application many times renders the material useless or even detrimental. Listed below are questions concerning the components of a combination material which must be answered or understood before consideration of purchase.

Fertilizer Component:

- Is it the right time of year to fertilize? Summer applications to cool-season grasses may be detrimental.
- Is the P and K needed (results of soil test important) and in correct ratio? For instance, an extremely high level of soil P may result in a nutrient imbalance and poor growth.
- Is the recommended coverage (rate) appropriate for time of year and turf species? High N rates are not recommended during the spring when rapid growth normally occurs with cool-season turf grasses.
- Is lime needed in addition to this fertilizer? Normal weathering and continued use of fertilizer may increase acidity beyond the range of tolerance

for desired turf species.

Insecticide Components:

- Is insecticide specific for the insect problem? For example, chlordane would not be particularly effective against chinch bug.
- Is rate (recommended coverage) appropriate for control selected? Low insecticide rates may not kill insect populations. High rates may cause accumulation in soil.
- 3. Are special precautions required because of toxicity to pets or humans? Consider safety first.
- 4. For best results, should this insecticide be watered in as is the fertilizer component? Without irrigation the fertilizer may be ineffective for such insects as sod webworm, chinch bug, etc.
- To insure proper kill of insect, will insects be active (present) at time of application? Spring applications to kill or prevent sod webworm would be ineffective.
- If insect is present, will the fertilizer component be detrimental to turf? For instance, summer fertilizer application may be more damaging than the insects.

Fungicide Component:

 Has the disease been identified? Fungicide selection differs with specific diseases.

- 2. Will the fungicide be used to eradicate or prevent disease? To prevent a disease from occurring usually requires application of fungicides at 7 to 10 day intervals. To control a disease already present will also require a number of fungicide applications. In either case, you would likely end up with an excessive amount of fertilizer.
- 3. Is the rate used (recommended coverage) sufficient to achive control? Higher rates are needed when disease causing fungi are active.
- 4. Are special precautions required because of fungicidal toxicity to turf, children, pets or humans applying the material? High temperatures can increase toxicity of some fungicides to turf and extreme care must be taken by the applicator when applying all fungicides.
- 5. Since only a small portion of the fungicide will remain on the leaf surface, will the fungicide be effective? Unless the fungicide becomes systemic in the plant the only disease causing fungi that will be controlled are those present in the thatch.
- Being unable to irrigate after application, will the fertilizer component cause burn of turf? During hot weather, fertilizer burn from soluble nitrogen sources can be severe if not irrigated immediately after application.
- Could the added fertilizer counteract the effect of the fungicide? Research has shown that turf grown under high nitrogen levels is more susceptible to attack by the leaf spot fungi.
- Is a fungicide necessary? Diseases such as Fusarium blight are very difficult to control with fungicides, Furthermore the lack of irrigation after application could increase severity of this disease.

Herbicide Component:

- Will the herbicide control the specific weed(s) problem? Certain weeds are very hard to kill and reguire special herbicides.
- Is recommended rate higher than it would be if the herbicide was applied as a spray? The higher the herbicide rate, the greater the possibility of ornamental damage due to herbicides.
- Are the special precautions concerning the danger to ornamentals understood? Certain herbicides such as dicamba move readily in the soil, and an overdose can mean death to trees and shrubs.
- 4. Is the herbicide being applied when the weeds are most susceptible? Generally weeds are easiest killed when in seedling stage of growth.
- 5. Will existing turf be injured if material is applied during hot weather? Many herbicides will burn turf if applied on a hot day.
- 6. Will the granular herbicide be as effective as a spray formulation? The effectiveness of materials such as 2,4-D and dicamba is greatly reduced when applied as a granular material, thus higher rates must be used.

These questions which have been asked and briefly qualified will help one decide on the feasibility of using any fertilizer or pesticide and specifically relates to the fertilizer-pesticide combination materials. If these questions seem too numerous, try asking yourself the necessary questions when the **third** ingredient of a combination material is added.