English visitors

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those type of socks." Mrs. Paulev commented. In fact, public schools reqire school uniforms of gray suits, shirts, and red ties. England has school year around except for a six-week summer break.

Saving for the trip was no sacrifice Mrs. Pauley insists because "it is worth everything. It is what we wanted more than anything else.'

"I wanted to take this trip while I could." Mrs. Pauley explained ruefully as she held up her walking cane. For the last ten years she has suffered from muscular dystophy. "But why should I be miserable and complain?" she asks. "I can do most anything I want," she added with the cheerful finality that is so typical of her character.

America is a lot like the Pauley's expected except, "it is so hot." Mrs. Pauley said of the heat wave that has blanketed the area.

The Landis's enjoy sharing their farm with others who appreciate it. They spend many hours comparing different forms of expressions between the two countries. "In England, 'come for tea' really means come for the evening meal, not a cup of tea." Mrs. Pauley explained. "And we call a car windshield a windscreen." When Nickolas asks his American friends for a cookie, Douglas eyes him strangly until his mother

NEWARK, Del. — Field research at the Delaware Agricultural Experiment Station at Newark may lead to an effective way to apply nitrogen when irrigated corn needs it most. Agronomist Merle Teel and his student assistant Robert Turnbull acheived significant yield increases by spraying corn with urea solution as it approached the reproductive stage of growth.

Despite all the nitrogen growers apply, it is still the chief yieldlimiting factor for irrigated corn, the scientist explains. The problem is, rainfall and irrigation can move some of the nitrogen beyond the rooting depth of corn seedlings. Because of this risk, many

explains that in England cookies are called biscuits.

Besides visiting many local attractions the Pauleys have visited Hershey Park, LongWood Gardens and Washington D.C. "It's a smashing holiday," Mrs. Pauley claimed when referring to their three week visit. In England the word holiday replaces our word for vacation.

The Groff's and the Landis's hope to visit England someday but in the meanwhile they will revert to more letter writing and phone calls.

growers spread only one-third to one-half of the required nitrogen prior to planting, and side-dress the rest later in the season. But wet soils often prevent late sidedressing. Further, nitrogen applied through an irrigation system may move into waterlogged soils where it becomes lost through leaching or denitrification. Therefore, in July, 1982, the scientist and student decided to test another method of applying nitrogen at the period of peak demand.

They misted corn at early tasseling and again at the full-silk stage with a solution made by dissoving 5.5 gallons of granular urea in a gallon of hot water. With each misting they applied 5 gallons of solution per acre, totalling 16.5 pounds of nitrogen per acre. Leaf margins turned white within four days, but the damage was minimal and not considered a serious threat.

Teel had no reason to expect a yield increase, because the corn had been fertilized when 4 inches tall with 150 pounds of N in the

Silage Carts

Manure Tanks

torm of ammonium nitrate, and the crop followed soybeans. The foliar nitrogen spray was tested at a wide range of plant densities, ranging from 9,600 to 25,000 plants per acre.

In seven of the 14 comparisons, yields were greater with foliar urea even with lower plant populations. If the urea were of no benefit, the untreated rows should have outyieled the misted rows by 18 bushels per acre due to a higher plant density. But in actuality there was only a 5.5-bushel difference. In five cases, yields of the misted corn were equal or greater, with a population disadvantage ranging between 1,200 and 2,700 plants per acre.

When yields were compared on the basis of bushels of grain per 1,009 plants (an index of crop efficiency), urea had a marked effect in 10 of the 14 comparisons. At 20,000 plants per acre, foliar urea increased yields from 165 to 179.8 bushels per acre. This 14.8-bushel benefit was realized by adding only 16.5 pounds of N. Such a degree of nitrogen use efficiency is seldom realized.

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Teel and Turnball found a direct relationship between plant population densities and yields on irrigated corn, providing there was sufficient nitrogen. To ensure high yields under irrigation, then, a grower should go for high plant population densities and make sure there is enough nitrogen at the period of peak demand, around the time of tassel emergence. In this study, a foliar spray of urea at that time clearly contributed to increased ear size.



