B-86: Influence of weather conditions on seasonal abundance of narrow leaf disorder in chilli, *Capsicum annuum* L. at Aralaganwila

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Narrow leaf disorder (NLD) limits chilli production in most areas of the dry Zone of Sri Lanka. Severity of NLD was studied in staggered, monthly plantings of chilli (variety MI-2) under field conditions in non-calcic brown soils at Aralaganwila from February 1991 to December 1992. Incidence of NLD was also observed on chilli in fields of Mahaweli System B.

The incidence was more severe during Yala than during Maha. It peaked twice in the year, one from March to April and the other from July to August. The plantings during mid September to January experienced the least incidence. Plants established during February and June to mid August were the most prone to NLD than those established during other months. The seasonal trends of NLD and weather factors indicated severe incidence in plantings that suffered from adverse weather conditions (humidity, higher soil and ambient temperature, evapo- transpiration, wind and drought). The stress caused to the root system by these conditions may induce or promote NLD symptoms in chilli plants. A higher rate of incidence was found in chilli cultivations in less fertile sandy soils with low content of organic matter than in clay soils or sandy soils with higher content of organic matter. Thus, there is a possibility to avoid lands of severe NLD incidence by adjusting planting time and field selection.