Soybean (**Glycine max** (L.) Merr.) is an important crop in Zambia but many foliar diseases pose a serious threat to its successful production in the country. During the last three years frog eye leaf spot disease caused by *Cercospora sojina* Hara has become the most prevalent disease in most parts of Zambia. A survey on farmers' fields under SCS1, Kaleya, Magoye and Hernon-147 soybean cultivars in agroecological zone II of Zambia was carried out during the 1996/97 growing season to determine the incidence and severity of frog eye leaf spot. Disease incidence and severity was studied by monitoring disease progress at two weeks interval from the beginning of January to April. A total of nine fields were surveyed in three provinces namely Central, Lusaka and Southern. Soybean cultivars were evaluated for yield losses resulting from frog eye leaf spot. Field plots of each cultivar were either sprayed twice with benomyl or not sprayed at all. Nine samples of frog eye leaf spot of soybean, collected from Central, Lusaka and Southern provinces revealed variability among the isolates of *Cercospora sojina* (Cs-01 to Cs-09) in morphology, physiology and virulence. Isolate Cs-08 had the greatest conidial length and Cs-07 had the least conidial length. On the basis of conidial width, isolates were grouped in four categories; and included Cs-04, Cs-05 and Cs-06 (small < 5.0fim); Cs-08 (broad 6.0-6.5fim);Cs-01, Cs-02, Cs-03, Cs-07 and Cs-09 (very broad > 7.0fim). After the third day of growth on Carrot leaf decoction agar isolates Cs-04, Cs-07, Cs-08 and Cs-09 produced the largest colony diameters while isolates Cs-02 and Cs-06 had the slowest rate of growth. Growth rate of isolates on Potato dextrose agar and Sabouraud dextrose agar did not show any significant differences (P≤0.05) throughout the period of culturing. Pathogenicity and virulence of the isolates tested in green house grown plants at four weeks showed that isolates Cs-02 and Cs-08 were the most virulent and produced lesions with a mean diameter of 5.1 mm fourteen days after inoculation. The least virulent isolates were Cs-04, Cs-05 and Cs-05 which produced lesions of 2.0 mm diameter or less. Results obtained from these studies showed that the incidence of frog eye leaf spot was highest in Southern province (5.1),