

of biologically active peptides. However, it still requires a major research and development program. It goes without saying that production is not the sole requisite for a military capability.

There are stringent requirements necessary for field dissemination. Information in the open literature about stability of peptides in non-laboratory conditions is not readily available. It is possible that these novel compounds are sensitive to environmental effects such as temperature, wind and humidity. Protein toxins, such as botulinum toxin, have been shown to be very sensitive to such effects. For example, botulinum toxin inactivates readily and loses its toxicity in field dissemination. While this may be a problem for large protein molecules, the peptides discussed above may not be sensitive in the same way. Small peptides, especially those which have been modified to have a circular structure, have higher stability and are more resistant to inactivation than the larger proteins.

4.2 Proliferation

The possibility exists that countries or small groups could conduct secret research and development of weapons based on toxins or bioregulators. However, the use of new sophisticated technology requires specialized and expensive equipment, and qualified personnel. These factors would provide an effective barrier to research by anyone with limited resources. Of course, it must be