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### **STRUCTURE OF WEED INFESTATION IN POTATO CROPS**

Taking into account the structure of the species composition of the segetal vegetation allows for the timely application of herbicides and prevention of weed development in potato agrocenoses. Over the years of research (2022-2023), surveys were conducted during the main phases of potato vegetation to determine the dynamics of weed infestation in the crops.

Based on the research results, it was found that there is a diversity of weed species in potato plantings. Annual weed species accounted for up to 70-73% of the total quantity. Among the most common species in potato plantings are: *Chenopodium album* - 20%, *Amaranthus retroflexus* L. - 14%, *Galinsoga parviflora* Cav. - 11%, *Polygonum convolvulus* L. - 10%, *Raphanus raphanistrum* - 7%, and others.

Furthermore, perennial rhizome weeds such as *Elymus repens* and *Equisetum*

*arvense* L. were also identified, constituting 6-7% of the total.

Rhizomatous weeds were also found, weeds were also identified, making up approximately 13-16% of the total, including *Convolvulus arvensis* L., *Cirsium arvense* L., and *Sonchus oleraceus*.

It's worth noting that the ratio between biological weed species remained stable over the years of research: the quantity of perennial weeds averaged 17-20% of the total, annual weeds accounted for 60-65%, and the quantity of grass weed species constituted 17-18% of all weeds.

In summary, it was determined during the potato vegetation period that weeds such as *Galinsoga parviflora* Cav., *Chenopodium album*, and *Amaranthus retroflexus* L. remained a significant issue in potato plantings.

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## **EFFECTIVENESS OF HERBICIDE APPLICATION IN WINTER WHEAT CROPS**

The effectiveness of herbicide application in winter wheat crops is a critical factor in weed control and overall crop management. Herbicides are used to control weeds that can compete with winter wheat for resources such as sunlight, water, and nutrients. Effective herbicide application can lead to increased crop yields and improved crop quality.

The key factors that influence the effectiveness of herbicide application in winter wheat crops include:

1. **Timing:** Herbicides should be applied at the right growth stage of both the weeds and the winter wheat. Early application can prevent weeds from establishing and competing with the crop.
2. **Weed Species:** Different herbicides are effective against different weed species. It's important to identify the weed species present and select the appropriate herbicide for control.
3. **Herbicide Type:** There are various types of herbicides, including pre-