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Seed Habit

The sporophytes produce two types of spores microspores and megaspores. In Angiospermic plant male and female gametes fuse to form zygote which develop in to embryo inside the ovule. Rest of the gametophytic tissue and integuments is known as **seed**. After shedding the seed germinates and form a new plant.

Thus the requirement for the formation of seeds are as follows:

1. Formation of two types of spores microspores and megaspores (Heterospory).
2. Reduction in the number of functional Megaspore to one in each megassporangeium.
3. Retention of Megaspore in the megasporengium until embryo development.
4. Elaborating of the optical part of Megasporangium (stigma) to receive microspore or pollen grains.

Most of species of selaginella are heterosporous and have only one functional megaspore mother cell which give rise to four megaspore of the meiosis. Only a single functional megaspore in a megasporangium is present female gametophyte fertilization and embryo develop takes place within the megasporangium. Thus evolution of seed habit took place in such species.

But the seeds developed in these species can not be called true seeds because

- i) The megasporangium is not covered with integuments and
- ii) There is no resting stage after embryo development, development of embryo is accompanied with development of shoot and rhizophase.