

ASTRONOMICAL NOTES.

Eclipses.—There will be two eclipses in November 1938; one of these is a total eclipse of the Moon and will take place on November 8, the circumstances of the eclipse being as follows :—

Moon enters umbra	2h-11m A.M.
Middle of eclipse	3-56 A.M.
Moon leaves umbra	5-42 A.M.

The times are in Indian Standard Time. The magnitude of the eclipse is 1.36 taking the Moon's diameter as unit. The partial eclipse of the Sun that occurs on November 21-22 will not be visible in India.

Planets during November 1938.—Mercury can be seen low down in the western sky for a short while after sunset. On November 25, it will have greatest elongation from the Sun ($21^{\circ} 51''$ E). Venus will be gradually moving westwards and during the latter half of the month, will be too close to the Sun to be conveniently visible. It will be in conjunction with Mercury on

November 8 and with the Sun on November 20. Mars will be visible as a morning star, rising about three hours before sunrise.

Both the planets Jupiter and Saturn will continue to be bright objects favourably placed for observation in the early part of the night. Uranus is in the constellation Aries and can be seen near the fifth magnitude star σ Arietis. On November 8 there will be a close conjunction of the planet with the Moon, the angular distance between the two being about half a degree.

Two New Satellites of Jupiter.—Information has been received (*U.A.I. Circular* 721) of the discovery of two new satellites of Jupiter by Dr. Nicholson on photographs taken with the 100-inch telescope of the Mount Wilson Observatory. Both these satellites (tenth and eleventh in the order of discovery) are reported to be of the 19th magnitude and are extremely faint.

T. P. B.

Blyxa echinosperma.

MESSRS. W. WIGHT AND P. K. BARUA, Indian Tea Association, Tocklai Experimental Station, Cinnamara, Assam, write under date, September 15, 1938, as follows :—

“We wish to draw attention to a phase in the biology of *Blyxa echinosperma* which must be familiar to field workers but which is unrecorded in any relevant literature which we have had the opportunity of consulting. The peduncles of *Blyxa echinosperma* are exceedingly long but the plant appears to inhabit water which is deeper than the maximum length of the peduncle. In deep water the roots somehow release their hold on the bottom so that the plant floats to the top prior to flowering: decay then begins amongst the floating mass of vegetation in which the flowers, with their now unnecessarily long peduncles, develop

and set seed with considerable rapidity. In different tanks this phenomenon takes place at slightly different times. In shallow water *Blyxa echinosperma* seems to remain rooted, and the peduncles reach the top of the water, though appreciable decay of the submerged leaves may nevertheless take place. In deep water the rapid rise to the surface of previously submerged plants, complete with root systems, is a striking phenomenon. It would seem that *Blyxa echinosperma* is undesirable in watertanks and we have observed one case where the sudden pollution of a previously clean and sweet tank was caused by the decay of (originally submerged) *Blyxa echinosperma* plants on the surface of the water at the time of anthesis.”