Handbook of the Bruchidae of the United States and Canada

Introduction to the Acrobat pdf edition

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Handbook of the Bruchidae of the United States and Canada

(Insecta, Coleoptera)

Volume 2

(Illustrations)

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Handbook of the Bruchidae of the United States and Canada

(Insecta, Coleoptera)

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Volume 2
(Illustrations)

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Abstract

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Distinguishing characteristics and diagnostic keys are given for the 5 subfamilies, 24 genera, and 156 species of the seed beetle family Bruchidae of the United States and Canada (including Hawaii). Associated data for each species description include a history of the name, synonymical names, type specimen information, geographical distribution, host plants, and parasitoids. Appendices give species, host, fossil, and parasitoid lists as well as a glossary of terms and a bibliography.

Bruchidae are found on every major land mass except Antarctica and New Zealand. Eggs are usually laid on the seed or fruit of a plant suitable for development of the larva. Immature stages are spent inside seeds that have been excavated by larval feeding. Adults live free and feed on pollen and nectar.

Johnson (1970) estimates that approximately 84 percent of the known hosts of Bruchidae are in the plant family Leguminosae. The remaining hosts are scattered among 31 other families. Sixteen plant families support larval feeding in the United States and Canada. Several species of Bruchidae, especially those with a cosmopolitan distribution, are notorious pests of stored leguminous seeds.

Keywords: Coleoptera, Bruchidae, Amblycerinae, Bruchidiinae, Bruchinae, Kytorhininae, Megacerinae, United States, Canada, Hawaii, taxonomy, insect-plant interactions.

This is part of a series of studies of bruchid genera contributing to a comprehensive database for this important seed-feeding beetle family in the Western Hemisphere. It provides the means to identify these insects for taxonomists, students, museum curators, biodiversity workers, port identifiers, and ecologists conducting studies in rangeland, pasture, and forest management in the United states and Canada.

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While supplies last, single copies of this publication can be obtained at no cost from John M. Kingsolver, Florida State Collection of Arthropods, P.O. box 147100, Gainesville, FL 32614–7100.

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Callosobruchus maculatus

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312. Abnormal male, pygidium.
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Acanthoscelides chiricahuae

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Figure 400

Acanthoscelides comstocki

395. Dorsal habitus.
396. Pygidium.
397. Hind leg.
398. Antenna.
399. Male genitalia, median lobe.
400. Male genitalia, lateral lobes.

Figure 401

Figure 402

Acanthoscelides daleae

401. Dorsal habitus.
402. Hind leg.
403. Antenna.
404. Male genitalia, median lobe.
405. Male genitalia, lateral lobes.

Figure 403

Figure 404

Figure 405

Figure 406

Figure 407

Acanthoscelides desmanthi

406. Dorsal habitus.
407. Hind leg.
408. Male and female antennae.
409. Male genitalia, median lobe (a, lateral aspect of apex).
410. Male genitalia, lateral lobes.

Figure 408

Figure 409

Figure 410

Figure 411

Figure 412

Figure 413

Figure 414

Figure 415

Acanthoscelides distinguendus

411. Dorsal habitus.
412. Hind leg.
413. Male and female antennae.
414. Male genitalia, median lobe.
415. Male genitalia, lateral lobes.

Figure 416

Figure 417

Figure 418

Figure 419

Figure 420

Acanthoscelides flavescens

416. Dorsal habitus.
417. Hind leg.
418. Antenna.
419. Male genitalia, median lobe.
420. Male genitalia, lateral lobes.

Figure 421

Figure 422

Figure 423

Figure 424

Figure 425

Acanthoscelides floridae

421. Dorsal habitus.
422. Hind leg.
423. Antenna.
424. Male genitalia, median lobe.
425. Male genitalia, lateral lobes.

Figure 426

Figure 427

Figure 428

Figure 429

Figure 430

Figure 431

Acanthoscelides fraterculus

426. Dorsal habitus.
427. Pygidium.
428. Hind leg.
429. Antenna.
430. Male genitalia, median lobe.
431. Male genitalia, lateral lobes.

Figure 432

Figure 433

Figure 434

Figure 435

Figure 436

Acanthoscelides fumatus

432. Dorsal habitus.
433. Hind leg.
434. Antenna.
435. Male genitalia, median lobe.
436. Male genitalia, lateral lobes.

Figure 437

Figure 438

Figure 439

Figure 440

Figure 441

Figure 442

Acanthoscelides griseolus

437. Dorsal habitus.
438. Pygidium.
439. Hind leg.
440. Antenna.
441. Male genitalia, median lobe.
442. Male genitalia, lateral lobes.

Figure 443

Figure 444

Figure 445

Figure 446

Figure 447

Acanthoscelides helianthemum

443. Dorsal habitus.
444. Hind leg.
445. Antenna.
446. Male genitalia, median lobe.
447. Male genitalia, lateral lobes.

Figure 448

Figure 449

Figure 450

Figure 451

Figure 452

Acanthoscelides herissantitus

448. Dorsal habitus.
449. Hind leg.
450. Antenna.
451. Male genitalia, median lobe.
452. Male genitalia, lateral lobes.

Figure 453

Figure 454

Figure 455

Acanthoscelides inquisitus

453. Dorsal habitus.
454. Hind leg.
455. Antenna.
456. Male genitalia, median lobe.
457. Male genitalia, lateral lobes.

Figure 456

Figure 457

Figure 458

Figure 459

Figure 460

Figure 461

Figure 462

Acanthoscelides kingsolveri

458. Dorsal habitus.
459. Hind leg.
460. Antenna.
461. Male genitalia, median lobe.
462. Male genitalia, lateral lobes.

Figure 463

Figure 464

Figure 465

Figure 466

Figure 467

Figure 468

Acanthoscelides lobatus

463. Dorsal habitus.
464. Pygidium.
465. Hind leg.
466. Male and female antennae.
467. Male genitalia, median lobe.
468. Male genitalia, lateral lobes.

Figure 469

Figure 470

Figure 471

Figure 472

Figure 473

Acanthoscelides longistilus

469. Dorsal habitus.
470. Hind leg.
471. Antenna.
472. Male genitalia, median lobe.
473. Male genitalia, lateral lobes.

Figure 474

Figure 475

Figure 476

Figure 477

Figure 478

Acanthoscelides macrophthalmus
474. Dorsal habitus.
475. Male head.
476. Female head.
477. Hind leg.
478. Female pygidium.

Figure 479

Acanthoscelides macrophthalmus

479. Male and female antennae.
480. Male genitalia, median lobe.
481. Male genitalia, lateral lobes.

Figure 480

Figure 481

Figure 482

Figure 483

Figure 484

Acanthoscelides margaretae

482. Dorsal habitus.
483. Hind leg.
484. Antenna.
485. Male genitalia, median lobe.
486. Male genitalia, lateral lobes.

Figure 485

Figure 486

Figure 487

Figure 488

Figure 489

Figure 490

Figure 491

Figure 492

Acanthoscelides mixtus

487. Dorsal habitus.
488. Pygidium.
489. Hind leg.
490. Antenna.
491. Male genitalia, median lobe.
492. Male genitalia, lateral lobes.

Figure 493

Figure 494

Acanthoscelides modestus

493. Dorsal habitus.
494. Hind leg.
495. Male and female antennae.
496. Male genitalia, median lobe.
497. Male genitalia, lateral lobes.

Figure 495

Figure 496

Figure 497

Figure 498

Figure 499

Figure 500

Figure 501

Figure 502

Figure 503

Acanthoscelides mundulus

498. Dorsal habitus.
499. Pygidium.
500. Hind leg.
501. Antenna.
502. Male genitalia, median lobe.
503. Male genitalia, lateral lobes.

Figure 504

Figure 505

Figure 506

Figure 507

Figure 508

Acanthoscelides napensis

504. Dorsal habitus.
505. Hind leg.
506. Antenna.
507. Male genitalia, median lobe.
508. Male genitalia, lateral lobes.

Figure 509

Figure 510

Figure 511

Acanthoscelides obrienorum

509. Male dorsal habitus.
510. Female dorsal habitus.
511. Male pygidium.
512. Female pygidium.
513. Hind leg.

Figure 512

Figure 513

Figure 514

Acanthoscelides obrienorum

514. Antenna.
515. Male genitalia, median lobe.
516. Male genitalia, lateral lobes.

Figure 515

Figure 516

Figure 517

Figure 518

Figure 519

Figure 520

Figure 521

Acanthoscelides obsoletus

517. Dorsal habitus.
518. Hind leg.
519. Male and female antennae.
520. Male genitalia, median lobe.
521. Male genitalia, lateral lobes.

Figure 522

Figure 523

Acanthoscelides obtectus

522. Dorsal habitus.
523. Hind leg.
524. Male and female antennae.
525. Male genitalia, median lobe.
526. Male genitalia, lateral lobes.

Figure 524

Figure 525

Figure 526

Figure 527

Figure 528

Acanthoscelides oregonensis

527. Dorsal habitus.
528. Hind leg.
529. Antenna.
530. Male genitalia, median lobe.
531. Male genitalia, lateral lobes.

Figure 530

Figure 531

Figure 532

Figure 533

Figure 534

Figure 535

Figure 536

Figure 537

Acanthoscelides pallidipennis

532. Dorsal habitus.
533. Pygidium.
534. Hind leg.
535. Antenna.
536. Male genitalia, median lobe.
537. Male genitalia, lateral lobes.

Figure 538

Figure 539

Figure 540

Figure 541

Figure 542

Acanthoscelides pauperculus

538. Dorsal habitus.
539. Hind leg.
540. Antenna.
541. Male genitalia, median lobe.
542. Male genitalia, lateral lobes.

Figure 543

Figure 544

Figure 545

Figure 546

Figure 547

Figure 548

Acanthoscelides pectoralis

543. Dorsal habitus.
544. Pygidium.
545. Hind leg.
546. Antenna.
547. Male genitalia, median lobe.
548. Male genitalia, lateral lobes.

Figure 549

Figure 550

Figure 551

Figure 552

Figure 553

Figure 554

Acanthoscelides pedicularius

549. Dorsal habitus.
550. Pygidium.
551. Hind leg.
552. Antenna.
553. Male genitalia, median lobe.
554. Male genitalia, lateral lobes.

Figure 555

Figure 556

Figure 557

Figure 558

Figure 559

Figure 560

Acanthoscelides perforatus

555. Dorsal habitus.
556. Pygidium.
557. Hind leg.
558. Male and female antennae.
559. Male genitalia, median lobe.
560. Male genitalia, lateral lobes.

Figure 561

Figure 562

Figure 563

Figure 564

Figure 565

Figure 566

Figure 567

Acanthoscelides prosopoides

561. Dorsal habitus.
562. Pygidium.
563. Hind leg.
564. Male antenna.
565. Female antenna.
566. Male genitalia, median lobe.
567. Male genitalia, lateral lobes.

Figure 568

Figure 569

Figure 570

Figure 571

Figure 572

Figure 573

Acanthoscelides pullus

568. Dorsal habitus.
569. Pygidium.
570. Hind leg.
571. Antenna.
572. Male genitalia, median lobe.
573. Male genitalia, lateral lobes.

Figure 574

Figure 575

Figure 576

Figure 577

Figure 578

Acanthoscelides pusillimus

574. Dorsal habitus.
575. Hind leg.
576. Antenna.
577. Male genitalia, median lobe.
578. Male genitalia, lateral lobes.

Figure 579

Figure 580

Figure 581

Figure 582

Figure 583

Figure 584

Figure 585

Acanthoscelides quadridentatus

579. Dorsal habitus.
580. Male pygidium.
581. Female pygidium.
582. Hind leg.
583. Antenna.
584. Male genitalia, median lobe.
585. Male genitalia, lateral lobes.

Figure 586

Figure 587

Figure 588

Figure 589

Figure 590

Figure 591

Acanthoscelides rufovittatus

586. Dorsal habitus.
587. Pygidium.
588. Hind leg.
589. Antenna.
590. Male genitalia, median lobe.
591. Male genitalia, lateral lobes.

Figure 592

Figure 593

Figure 594

Figure 595

Figure 596

Figure 597

Acanthoscelides schaefferi

592. Dorsal habitus.
593. Pygidium.
594. Hind leg.
595. Antenna.
596. Male genitalia, median lobe.
597. Male genitalia, lateral lobes.

Figure 598

Figure 599

Figure 601

Figure 600

Figure 602

Figure 603

Acanthoscelides schrankiae

598. Dorsal habitus.
599. Hind leg.
600. Metacoxa.
601. Antenna.
602. Male genitalia, median lobe.
603. Male genitalia, lateral lobes.

Figure 604

Figure 605

Figure 606

Figure 607

Figure 608

Figure 609

Figure 610

Acanthoscelides seminulum

604. Dorsal habitus.
605. Pygidium.
606. Hind leg.
607. Male antenna.
608. Female antenna.
609. Male genitalia, median lobe.
610. Male genitalia, lateral lobes.

Figure 611

Figure 612

Figure 613

Figure 614

Figure 615

Acanthoscelides speciosus

611. Dorsal habitus.
612. Hind leg.
613. Antenna.
614. Male genitalia, median lobe.
615. Male genitalia, lateral lobes.

Figure 616

Figure 617

Figure 618

Figure 619

Figure 620

Figure 621

Acanthoscelides stylifer

616. Dorsal habitus.
617. Pygidium.
618. Hind leg.
619. Antenna.
620. Male genitalia, median lobe.
621. Male genitalia, lateral lobes.

Figure 622

Figure 623

Figure 624

Figure 625

Figure 626

Acanthoscelides subaequalis

622. Dorsal habitus.
623. Hind leg.
624. Antenna.
625. Male genitalia, median lobe.
626. Male genitalia, lateral lobes.

Figure 627

Figure 628

Figure 629

Figure 630

Figure 631

Acanthoscelides submuticus

627. Dorsal habitus.
628. Hind leg.
629. Antenna.
630. Male genitalia, median lobe.
631. Male genitalia, lateral lobes.

Figure 632

Figure 633

Figure 634

Figure 635

Figure 636

Acanthoscelides tenuis

632. Dorsal habitus.
633. Hind leg.
634. Antenna.
635. Male genitalia, median lobe.
636. Male genitalia, lateral lobes.

Figure 637

Figure 638

Figure 639

Figure 640

Figure 641

Figure 642

Acanthoscelides tridenticulatus

637. Dorsal habitus.
638. Pygidium.
639. Hind leg.
640. Antenna.
641. Male genitalia, median lobe.
642. Male genitalia, lateral lobes.

Figure 643

Figure 644

Figure 645

Figure 646

Figure 647

Algarobius bottimeri

643. Male dorsal habitus.
644. Male pygidium.
645. Female pygidium.
646. Male genitalia, median lobe.
647. Male genitalia, lateral lobes.

Figure 648

Figure 649

Figure 650

Figure 651

Figure 652

Figure 653

Algarobius prosopis

648. Male dorsal habitus.
649. Female dorsal habitus.
650. Scutellum.
651. Male pygidium.
652. Female pygidium.
653. Antenna.

Figure 654

Algarobius prosopis

654. Hind leg.
655. Male genitalia, median lobe.
656. Male genitalia, lateral lobes.

Figure 655

Figure 656

Figure 657

Figure 658

Figure 659

Figure 660

Figure 661

Figure 662

Althaeus folkertsi

657. Dorsal habitus.
658. Pygidium.
659. Male and female antennae.
660. Hind leg.
661. Male genitalia, median lobe.
662. Male genitalia, lateral lobes.

Figure 663

Figure 664

Figure 665

Figure 666

Althaeus hibisci

663. Dorsal habitus.
664. Head.
665. Male and female antennae.
666. Hind leg.

Figure 667

Figure 668

Figure 669

Figure 670

Figure 671

Althaeus hibisci

667. Fore tarsus.
668. Middle tarsus.
669. Hind tarsus.
670. Male genitalia, median lobe.
671. Male genitalia, lateral lobes.

Figure 672

Figure 673

Figure 674

Figure 675

Figure 676

Figure 677

Althaeus steineri

672. Dorsal habitus.
673. Pygidium.
674. Antenna.
675. Hind leg.
676. Male genitalia, median lobe.
677. Male genitalia, lateral lobes.

Figure 678

Figure 679

Figure 680

Figure 681

Figure 682

Caryedes helvinus

678. Head.
679. Pygidium.
680. Hind leg.
681. Male genitalia, median lobe.
682. Male genitalia, lateral lobes.

Figure 683

Figure 684

Figure 685

Figure 686

Figure 687

Caryedes incensus

683. Dorsal habitus.
684. Pygidium.
685. Hind leg.
686. Male genitalia, median lobe.
687. Male genitalia, lateral lobes.

Figure 688

Figure 689

Figure 690

Figure 691

Gibbobruchus cristicollis

688. Dorsal habitus.
689. Head.
690. Male pygidium.
691. Female pygidium.

Figure 692

Figure 693

Figure 694

Figure 695

Gibbobruchus cristicollis

692. Antenna.
693. Hind leg.
694. Male genitalia, median lobe.
695. Male genitalia, lateral lobes.

Figure 696

Figure 697

Figure 698

Figure 699

Gibbobruchus divaricatae

696. Dorsal habitus.
697. Head.
698. Male pygidium.
699. Female pygidium.

Figure 700

Figure 701

Figure 702

Figure 703

Gibbobruchus divaricatae

700. Antenna.
701. Hind leg.
702. Male genitalia, median lobe.
703. Male genitalia, lateral lobes.

Figure 704

Figure 705

Figure 706

Figure 707

Gibbobruchus mimus

704. Dorsal habitus.
705. Head.
706. Male pygidium.
707. Female pygidium.

Figure 708

Figure 709

Figure 710

Figure 711

Gibbobruchus mimus

708. Antenna.
709. Hind leg.
710. Male genitalia, median lobe.
711. Male genitalia, lateral lobes.

Figure 712

Figure 713

Figure 714

Figure 715

Figure 716

Lithraeus atronotatus

712. Dorsal habitus.
713. Antenna.
714. Hind leg.
715. Male genitalia, median lobe.
716. Male genitalia, lateral lobes.

Figure 717

Figure 718

Meibomeus desmoportheus

717. Dorsal habitus.
718. Pygidium.
719. Male head.
720. Female head.

Figure 719

Figure 720

Figure 721

Figure 722

Figure 723

Figure 724

Meibomeus desmoportheus

721. Male and female antennae.
722. Hind leg.
723. Male genitalia, median lobe.
724. Male genitalia, lateral lobes.

Figure 725

Figure 726

Figure 727

Figure 728

Figure 729

Figure 730

Figure 731

Meibomeus musculus

725. Dorsal habitus.
726. Male antenna.
727. Female head.
728. Pygidium.
729. Hind leg.
730. Male genitalia, median lobe.
731. Male genitalia, lateral lobes.

Figure 732

Figure 733

Figure 734

Figure 735

Figure 736

Figure 737

Figure 738

Meibomeus surrubresus

732. Dorsal habitus.
733. Male head.
734. Female head.
735. Male and female antennae.
736. Hind leg.
737. Male genitalia, median lobe.
738. Male genitalia, lateral lobes.

Figure 739

Figure 740

Figure 741

Figure 742

Figure 743

Figure 744

Figure 745

739. Typical *Merobruchus* antenna, from *Merobruchus boucheri* (Central American species).

Merobruchus insolitus

740. Dorsal habitus.
741. Male pygidium.
742. Female pygidium.
743. Hind leg.
744. Male genitalia, median lobe.
745. Male genitalia, lateral lobes.

Figure 746

Figure 747

Figure 748

Figure 749

Figure 750

Figure 751

Merobruchus julianus

746. Dorsal habitus.
747. Head.
748. Pygidium.
749. Hind leg.
750. Male genitalia, median lobe.
751. Male genitalia, lateral lobes.

Figure 752

Figure 753

Figure 754

Figure 755

Figure 756

Figure 757

Merobruchus knulli

752. Dorsal habitus.
753. Male pygidium.
754. Female pygidium.
755. Hind leg.
756. Male genitalia, median lobe.
757. Male genitalia, lateral lobes.

Figure 758

Figure 759

Figure 760

Figure 761

Figure 762

Merobruchus lysilomae

758. Dorsal habitus.
759. Pygidium.
760. Hind leg.
761. Male genitalia, median lobe.
762. Male genitalia, lateral lobes.

Figure 763

Figure 764

Figure 765

Figure 766

Merobruchus major

763. Dorsal habitus.
764. Head.
765. Male pygidium.
766. Female pygidium.
767. Hind leg.
768. Male genitalia, median lobe.
769. Male genitalia, lateral lobes.

Figure 767

Figure 768

Figure 769

Figure 770

Figure 771

Figure 772

Figure 773

Figure 774

Figure 775

Merobruchus placidus

770. Dorsal habitus.
771. Male pygidium.
772. Female pygidium.
773. Hind leg.
774. Male genitalia, median lobe.
775. Male genitalia, lateral lobes.

Figure 776

Figure 777

Figure 778

Figure 779

Figure 780

Merobruchus terani

776. Dorsal habitus.
777. Pygidium.
778. Hind leg.
779. Male genitalia, median lobe.
780. Male genitalia, lateral lobes.

Figure 781

Figure 782

Figure 783

Figure 784

Figure 785

Merobruchus vacillator

781. Dorsal habitus.
782. Pygidium.
783. Hind leg.
784. Male genitalia, median lobe.
785. Male genitalia, lateral lobes.

Figure 786

Figure 787

Figure 788

Figure 789

Mimosestes acaciestes

786. Dorsal habitus.
787. Hind leg.
788. Male genitalia, median lobe.
789. Male genitalia, lateral lobes.

Figure 790

Figure 791

Mimosestes amicus

790. Dorsal habitus.
791. Head and pronotum, lateral aspect.
792. Hind leg.
793. Male genitalia, median lobe.
794. Male genitalia, lateral lobes.

Figure 792

Figure 793

Figure 794

Figure 795

Figure 796

Figure 797

Figure 798

Figure 799

Figure 800

Mimosestes insularis

795. Dorsal habitus.
796. Head and pronotum, lateral aspect.
797. Female pygidium.
798. Hind leg.
799. Male genitalia, median lobe.
800. Male genitalia, lateral lobes.

Figure 801

Figure 802

Figure 803

Figure 804

Figure 805

Mimosestes mimosae

801. Dorsal habitus.
802. Head and pronotum, lateral aspect.
803. Hind leg.
804. Male genitalia, median lobe.
805. Male genitalia, lateral lobes.

Figure 806

Figure 807

Figure 808

Figure 809

Figure 810

Figure 811

Mimosestes nubigens

806. Dorsal habitus.
807. Head and pronotum, lateral aspect.
808. Head and pronotum, dorsal aspect; arrow indicates denticulation.
809. Hind leg.
810. Male genitalia, median lobe.
811. Male genitalia, lateral lobes.

Figure 812

Figure 813

Figure 814

Figure 815

Figure 816

Figure 817

Mimosestes protractus

812. Dorsal habitus.
813. Pygidium.
814. 5th sternum, ventral aspect.
815. Hind leg.
816. Male genitalia, median lobe.
817. Male genitalia, lateral lobes.

Figure 818

Figure 819

Mimosestes ulkei

818. Dorsal habitus.
819. Pygidium.
820. Hind leg.
821. Male genitalia, median lobe.
822. Male genitalia, lateral lobes.

Figure 820

Figure 821

Figure 822

Figure 823

Figure 824

Figure 825

Figure 826

Figure 827

Figure 828

Neltumius arizonensis

823. Dorsal habitus.
824. Head and pronotum, lateral aspect.
825. Male pygidium.
826. Female pygidium.
827. Male genitalia, median lobe.
828. Male genitalia, lateral lobes.

Figure 829

Figure 830

Neltumius gibbithorax

829. Dorsal habitus.
830. Head and thorax, lateral aspect.
831. Antenna.
832. Hind femur.

Figure 831

Figure 832

Figure 833

Figure 834

Neltumius gibbithorax

833. Male pygidium.
834. Female pygidium.
835. Male genitalia, median lobe, ventral, internal sac everted.
836. Male genitalia, median lobe, lateral, internal sac everted.
837. Male genitalia, lateral lobes.

Figure 835

Figure 836

Figure 837

Neltumius texanus

838. Dorsal habitus.
839. Head and pronotum, lateral aspect.
840. Male pygidium.
841. Female pygidium.
842. Male genitalia, median lobe, ventral aspect.
843. Male genitalia, median lobe, lateral aspect.
844. Male genitalia, lateral lobes.

Figure 838

Figure 839

Figure 840

Figure 841

Figure 842

Figure 843

Figure 844

Figure 845

Figure 846

Figure 847

Figure 848

Figure 849

Figure 850

Sennius abbreviatus

845. Dorsal habitus.
846. Elytral pattern.
847. Hind leg.
848. Male genitalia, median lobe, ventral aspect.
849. Male genitalia, median lobe and lateral lobes, lateral aspect.
850. Male genitalia, lateral lobes.

Figure 851

Figure 852

Figure 853

Figure 854

Figure 855

Sennius cruentatus

851. Dorsal habitus.
852. Elytral pattern.
853. Hind leg.
854. Male genitalia, median lobe.
855. Male genitalia, lateral lobes.

Figure 856

Figure 857

Figure 858

Figure 859

Figure 860

Sennius discolor

856. Dorsal habitus.
857. Elytral pattern.
858. Hind leg.
859. Male genitalia, median lobe.
860. Male genitalia, lateral lobes.

Figure 861

Figure 862

Figure 863

Figure 864

Figure 865

Figure 866

Sennius fallax

861. Dorsal habitus.
862. Elytral pattern.
863. Pygidium.
864. Hind leg.
865. Male genitalia, median lobe.
866. Male genitalia, lateral lobes.

Figure 867

Figure 868

Figure 869

Figure 870

Sennius lebasi

867. Dorsal habitus.
868. Elytral pattern.
869. Normal pygidial pattern.
870. Aberrant pygidial pattern.

Figure 871

Sennius lebasi

871. Hind leg.
872. Male genitalia, median lobe.
873. Male genitalia, lateral lobes.

Figure 872

Figure 873

Figure 874

Figure 875

Figure 876

Figure 877

Figure 878

Figure 879

Sennius leucostauros

874. Dorsal habitus.
875. Elytral pattern.
876. Pygidium.
877. Hind leg.
878. Male genitalia, median lobe.
879. Male genitalia, lateral lobes.

Figure 880

Figure 881

Sennius medialis

880. Dorsal habitus.
881. Elytral pattern.
882. Hind leg.
883. Male genitalia, median lobe.
884. Male genitalia, lateral lobes.

Figure 882

Figure 883

Figure 884

Figure 885

Figure 886

Figure 887

Figure 888

Figure 889

Figure 890

Sennius morosus

885. Dorsal habitus.
886. Elytral pattern.
887. Pygidium.
888. Hind leg.
889. Male genitalia, median lobe.
890. Male genitalia, lateral lobes.

Figure 891

Figure 892

Figure 893

Figure 894

Figure 895

Sennius obesulus

891. Dorsal habitus.
892. Elytral pattern.
893. Hind leg.
894. Male genitalia, median lobe.
895. Male genitalia, lateral lobes.

Figure 896

Figure 897

Figure 898

Figure 899

Figure 900

Sennius simulans

896. Dorsal habitus.
897. Elytral pattern.
898. Hind leg.
899. Male genitalia, median lobe.
900. Male genitalia, lateral lobes.

Figure 901

Figure 902

Figure 903

Figure 904

Figure 905

Figure 906

Figure 907

Sennius whitei

901. Dorsal habitus.
902. Elytral pattern.
903. Head.
904. Antenna.
905. Hind leg.
906. Male genitalia, median lobe.
907. Male genitalia, lateral lobes.

Figure 908

Figure 909

Figure 910

Figure 911

Stator beali

908. Dorsal habitus.
909. Male pygidium.
910. Female pygidium.
911. Hind leg.
912. Male genitalia, median lobe.
913. Male genitalia, lateral lobes.
914. Male genitalia, spiculum gastrale.

Figure 912

Figure 913

Figure 914

Figure 915

Figure 916

Figure 917

Figure 918

Figure 919

Figure 920

Stator bottimeri

915. Dorsal habitus.
916. Male pygidium.
917. Female pygidium.
918. Hind leg.
919. Male genitalia, median lobe.
920. Male genitalia, lateral lobes.

Figure 921

Figure 922

Figure 923

Figure 924

Figure 925

Stator chihuahua

921. Dorsal habitus.
922. Male pygidium.
923. Female pygidium.
924. Male genitalia, median lobe.
925. Male genitalia, lateral lobes.

Figure 926

Figure 927

Stator coconino

926. Male genitalia, median lobe.
927. Male genitalia, lateral lobes.

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928. Dorsal habitus.
929. Male pygidium.
930. Female pygidium.
931. Hind leg
932. Male genitalia, median lobe.
933. Male genitalia, lateral lobes.
934. Male genitalia, spiculum gastrale.

Figure 928

Figure 929

Figure 930

Figure 931

Figure 932

Figure 933

Figure 934

Figure 935

Figure 936

Figure 937

Stator pruininus

935. Dorsal habitus.
936. Pygidium.
937. Hind leg.
938. Male genitalia, median lobe.
939. Male genitalia, lateral lobes.

Figure 938

Figure 939

Figure 940

Figure 941

Figure 942

Figure 943

Figure 944

Figure 945

Stator pygidialis

940. Dorsal habitus.
941. Male pygidium.
942. Female pygidium.
943. Hind leg.
944. Male genitalia, median lobe.
945. Male genitalia, lateral lobes.

Figure 946

Figure 947

Figure 948

Figure 949

Figure 950

Figure 951

Figure 952

Stator sordidus

946. Dorsal habitus.
947. Male pygidium.
948. Female pygidium.
949. Metacoxa.
950. Hind leg.
951. Male genitalia, median lobe.
952. Male genitalia, lateral lobes.

Figure 953

Figure 954

Figure 955

Figure 956

Figure 957

Figure 958

Figure 959

Figure 960

Stator subaeneus

953. Dorsal habitus.
954. Male pygidium.
955. Female pygidium.
956. Metacoxa.
957. Hind leg.
958. Male genitalia, median lobe.
959. Male genitalia, internal sac sclerites.
960. Male genitalia, lateral lobes.

Figure 961

Figure 962

Figure 963

Figure 964

Figure 965

Figure 9

Figure 967

Stator vachelliae

961. Dorsal habitus, male.
962. Dorsal habitus, female.
963. Male pygidium.
964. Female pygidium.
965. Hind leg.
966. Male genitalia, median lobe.
967. Male genitalia, lateral lobes.

Figure 968

Figure 969

Figure 970

Figure 971

Stylantheus macrocerus

968. Dorsal habitus.
969. Lateral aspect.
970. Pygidium.
971. Male and female antennae.

Figure 972

Stylantheus macrocerus

972. Hind leg.
973. Male genitalia, median lobe.
974. Male genitalia, median lobe, lateral aspect of apex.
975. Male genitalia, lateral lobes.

Figure 973

Figure 974

Figure 975